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In 2013, approximately 9.4% of the American population over the age of 12 reported illicit use of a substance in the past month (National Institute on Drug Abuse (NIDA), 2014), with rates of substance abuse the highest among individuals transitioning from adolescence to young adulthood, or transition-aged youth (TAY; Pottick, Warner, Vander Stoep, & Knight, 2014). Many TAY are no longer residing with their family of origin, and are working to gain independence in meeting the demands of adulthood (Wilens & Rosenbaum; 2013); however, parents continue to act as a resource for TAY to varying degrees (Davis, 2003). The continued connection with parents in this population suggests that parenting behaviors may continue to influence TAY.

The purpose of this study was to examine the relationships between perceptions of parental pampering, parental psychological control, inferiority feelings, and substance abuse in TAY using an Adlerian framework. In theory, substance abuse is a manifestation of the pampered lifestyle and inferiority feelings (Adler, 2005; Dreikurs, 1990); however, empirically validated definitions for each of these constructs is lacking in current research. Thus, a secondary aim of the study was to identify appropriate definitions for the latent constructs of pampering and inferiority feelings.

Participants in the study consisted of 210 undergraduate students between the ages of 18 and 25, who were asked to complete a series of instruments measuring perceptions of parental pampering (measured as enabling, autonomy granting, parental

care, and parental behavioral control), parental psychological control, feelings of inferiority (measured as self-esteem, general self-efficacy (GSE), abstinence self-efficacy (ASE), and shame), and use of alcohol and drugs. Structural equation modeling was used to examine how well the observed constructs define the latent constructs of pampering and inferiority feelings and to test an overall hypothesized model of the relationships amongst each of the variables. It was posited that pampering would be positively related to inferiority feelings, alcohol use, and drug use, and that inferiority feelings would partially mediate the relationship between pampering and substance abuse. In addition, parental psychological control was expected to positively relate to inferiority feelings.

Results of the study indicated that the observed variables enabling, autonomy granting, parental care, and parental behavioral control adequately define the latent construct of pampering, with autonomy granting and parental behavioral control loading more strongly on the latent construct. Similarly, self-esteem, GSE, ASE, and shame were found to define inferiority feelings, with self-esteem and shame loading more strongly than GSE and ASE. These findings provide potential empirical definitions of the theoretical constructs. Findings from the structural regression analysis indicated the model was not a good fit for the data. When examined separately, pampering was negatively related to both types of substance abuse, suggesting that in a college population, perceptions of pampering behaviors may be related to less substance abuse. Conversely, inferiority feelings were not related to either substance abuse in the sample. Average scores for the self-esteem, GSE, and ASE scales were high and average shame scores were low, indicating low feelings of inferiority in the sample. These findings

provide an argument for further analysis of the relationship between inferiority feelings and substance abuse in a more clinical sample. Findings garnered from the study provide implications for future research, counseling practice, and counselor training, including highlighting the importance of integrating family factors into prevention and treatment efforts in substance abuse counseling and into the training of substance abuse counselors.

THE POWER OF PERCEPTION: AN EXPLORATION OF THE RELATIONSHIP BETWEEN PERCEPTIONS OF PARENTING BEHAVIORS AND SUBSTANCE ABUSE IN TRANSITION-AGED YOUTH THROUGH AN ADLERIAN LENS

by

Katie A. Wachtel

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Approved by

Dr. Kelly L. Wester
Committee Chair

APPROVAL PAGE

This dissertation, written by Katie A. Wachtel, has been approved by the following committee of the Faculty of the Graduate School at The University of North Carolina at Greensboro.

Committee Chair Dr. Kelly L. Wester

Committee Members Dr. Craig S. Cashwell

Dr. Cheryl Buehler

Dr. John Willse

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CHAPTER I

INTRODUCTION

Substance abuse is a prevalent concern in today's society. According to the National Survey of Drug Use and Health (NSDUH) conducted by the Substance Abuse and Mental Health Services Administration (SAMHSA) in 2013, approximately 9.4% of the American population over the age of 12 reported illicit use of a substance in the past month (National Institute on Drug Abuse (NIDA), 2014), with rates of substance abuse the highest among individuals transitioning from adolescence to young adulthood (Pottick, Warner, Vander Stoep, & Knight, 2014). More specifically, 21% of individuals aged 18-25 reported illicit drug use and an estimated 40% reported engaging in binge drinking in the past month (SAMHSA, 2013). These staggering rates of substance abuse suggest this transitional period may be of particular interest when examining, preventing, and treating substance abuse.

The developmental period between adolescence and adulthood has gained attention as a crucial period for understanding and addressing mental health and substance related concerns (Wilens & Rosenbaum, 2013) and has been referred to as transition-aged youth (TAY; Davis, Geller, & Hunt, 2006; Pottick et al., 2014; Wilens & Rosenbaum, 2013). TAY are defined as individuals between the ages of 16 and 25 (Kenney & Gillis, 2008), and are considered distinctive in that individuals in this age group are at a peak time in identity formation (Davis, 2003). TAY are learning to

navigate the balance between the independence of adulthood, while still experiencing the biological and social challenges of adolescence (Pottick et al., 2014; Wilens & Rosenbaum, 2013). Although TAY seek autonomy and independence, lack of experience and social immaturity make navigating adult challenges difficult (Davis, 2003). A central task of TAY includes fostering more complex relationships, which often involves focusing strongly on peer relationships and attempting to differentiate from the family of origin (Davis, 2003; Wilens & Rosenbaum, 2013).

Healthy differentiation from the family can be difficult for TAY in that while the nature of relationships amongst family members are reassessed (Wilens & Rosenbaum, 2013), many TAY continue to rely on family members, specifically parents, for resources (Davis, 2003). Although legally individuals are labeled adults when they reach age 18, many individuals continue to rely on their parents as resources well into their 20s (Kenney & Gillis, 2008). Given this fact, there is a need for researchers to examine how this continued reliance on parents may impact the high rates of substance abuse among the TAY population. Researchers have acknowledged the importance of developmental transitions, peer influences, and changing family relationships on the abuse of substances amongst TAY (Davis, 2003; Pottick et al., 2014; Wilens & Rosenbaum, 2013); however, to date, no research exists examining the direct relationships between perceptions of parenting behaviors and substance abuse in TAY. If parents remain a robust force in the lives of this vulnerable population, better understanding of these direct relationships may provide insight into how and why the rates of substance abuse remain higher amongst TAY.

The hallmark of TAY is the experience of concurrent developmental transitions (Pottick et al., 2014; Wilens & Rosenbaum, 2013). In addition to the psychosocial challenges of developing autonomy and forming complex relationships (Davis, 2003), biological changes endured during the transitional years can further complicate healthy coping and development (Wilens & Rosenbaum, 2013). For example, individuals in early transition years do not have brains that are fully developed. When cognitive processes, such as decision-making and emotion regulation, are underdeveloped the risk of using unhealthy coping skills (e.g., substance abuse) is amplified (Wilens & Rosenbaum, 2013). Biological changes, coupled with psychosocial changes, can be overwhelming, and, according to Peterson and Leffert (1995), the more transitions an adolescent experiences simultaneously, the more likely he or she is to experience negative outcomes. Given that TAY have not reached the developmental maturity of adulthood (Wilens & Rosenbaum, 2013), it may be assumed that TAY struggle with transitions in a similar fashion as adolescents. Additionally, similar to adolescents, TAY are reported to continue to rely on parents as essential resources in gaining independence (Davis, 2003). However, although the impact of parenting behaviors on adolescent substance abuse have been well-documented (Arnold, 1987; Biggam & Power, 1998; Broman, Xin, & Reckase, 2008; Crawford & Novak, 2008; Fletcher, Steinberg, & William-Wheeler, 2004; Gault-Sherman, 2012; Mak & Kinsella, 2007; Smart, Chibucos, & Didier, 1990; Stattin & Kerr, 2000; Yahav, 2006), there is a lack of empirical data supporting the role of perceived parenting behaviors in the increased substance abuse rates in TAY.

In light of the numerous transitions faced by TAY, the need for appropriate services to support individuals in navigating this period of life is apparent; however, barriers to these services exist (Davis, 2003; Davis, Geller, & Hunt, 2006, Pottick et al., 2014). Services that address the unique needs of this population are made difficult due to the fact that many TAY are too old for child services, but are either unprepared or ineligible for adult services (Kenney & Gillis, 2008). Some adolescents enter the transitional age with pre-existing mental health or substance abuse concerns (Pottick et al., 2014), highlighting the importance of continuing care for this population. Many of these individuals have received child services (Pottick et al., 2014); however, when they age out of these services, they experience difficulty in finding services that support their continued needs (Davis, 2003). Researchers agree that services for TAY are not consistent across states and are often inadequate (Davis, 2003; Davis et al., 2006; Pottick et al., 2014). These researchers, however, have not examined differences between TAY who received services as adolescents and those who did not. According to the 1999 Client/Patient Sample Survey, mental health service utilization was highest amongst 16 to 17 year olds and lowest among 18 to 19 year old (Pottick et al., 2014); however, these results do not identify reasons for this age discrepancy. It is possible that individuals have less access to services once they reach age 18, but it is also possible those adolescents who accessed services have a decreased need for services when they reach young adulthood due to successful outcomes. For this reason, it is important for researchers to examine differences in TAY outcomes, such as substance abuse, between individuals who received services as adolescents and those who did not, as this might be

a method of addressing the lack of available services for TAY by decreasing the need with early intervention.

In addition to the variety of changes experienced by TAY, so too do their parents experience transitions in their roles as parents. Parents of TAY must reevaluate their responsibilities and learn to balance encouraging independence with continuing to serve as a guiding resource for their children (Davis, 2003). The level of guidance and assistance provided by parents of TAY can vary (Davis, 2003). Some authors have argued the importance of the stability parents can provide during this transitional period (Davis, 2003), while others have suggested separation from parents may decrease susceptibility to symptoms of mental illness and substance abuse (Wilens & Rosenbaum, 2013); however, neither of these assertions is grounded in theory, nor were they explored empirically. Although researchers agree that parents may be an important factor to consider when examining TAY outcomes, such as substance abuse, the lack of consensus regarding the manner in which parents influence these outcomes suggests a need for research that is theoretically grounded and examines empirically the direct relationships between parenting behaviors and substance abuse in TAY.

The apparent need for researchers linking parenting behaviors and substance abuse in TAY emphasizes the importance of a sound theoretical understanding of the relationships between the constructs. Alfred Adler's theory of individual psychology, Adlerian theory, may provide a useful framework for examining relationships between parenting factors and TAY outcomes such as substance abuse. A main tenet of Adlerian theory emphasizes early experiences, a concept that highlights the importance of family

factors (e.g., parenting experiences) as significant influences on an individual's development (Mosak & Maniacci, 1999). Perceptions of early experiences with the family play a role in personality development, a construct Adler termed life style (Mosak & Maniacci, 1999; Sweeney, 2009). Life style refers to the interlacing of an individual's thoughts, feelings, and behaviors surrounding himself and his environment (Mosak & Maniacci, 1999; Sweeney, 2009). Although Adler believed individuals are impacted by their early environments, he stated that individuals also take an active role in shaping that environment through their individual perceptions of relationships, behaviors, and experiences (Mosak & Maniacci, 1999).

In this active role, Adler believed an individual's perceptions of parenting factors are, in fact, more impactful than the actual parenting factors (Mosak & Maniacci, 1999), a belief that is supported empirically among adolescents (Bolkan, Sano, De Costa, Acock, & Day, 2010). Specifically, adolescent perceptions of reality had a greater impact on reported internal and external symptoms than did actual parenting styles (Yahav, 2006). One such perceived parenting style, using Adlerian terms, is that of the pampered lifestyle, in which individuals perceive things to come to them easily and have high expectations of others providing to them (Keene & Wheeler, 1994). A result, according to Adler, of the pampered lifestyle is a struggle with substance abuse (Dreikurs, 1990). The link to substance abuse appears to come from pampered individuals' difficulty empathizing with others (Dreikurs, 1990), impacting the development of positive social skills, which may result in use of substances as a method of increasing feelings of comfort in social situations (Steffenhagen, 1974).

When a child demonstrates a pampered life style, it can be assumed it could be the result of being pampered by another individual, most notably by the parents. Parental pampering is a style of parenting that involves spoiling a child and is reported as having potentially substantial deleterious effects on child development (Dreikurs, 1948), including development of a pampered life style and its associated consequences (Dreikurs, 1990; Keene & Wheeler, 1994). Although the relationship between parental pampering and substance abuse has been postulated theoretically, few researchers have attempted to validate these relationships empirically. Keene and Wheeler (1994) examined the relationship between life style themes and substance abuse in college freshman and found a positive relationship between high-risk substance use and the theme most closely related to the pampered life style; however, the Life Style Personality Inventory (LSPI) that was utilized did not directly measure the pampered life style. The lack of empirical evidence directly examining the relationship between the pampered life style and substance abuse highlights a gap in current research.

Family is thought to be a major influence on child development (Peterson & Leffert, 1995), and thus family influences on substance abuse have been examined closely through research. Parental influences dominate much of this research; however, application of Adlerian theory (e.g., parental pampering) when examining these influences is lacking. Understanding the potential impact of parental pampering on subsequent substance abuse in children is made difficult by the lack of valid measurement of the pampering construct. Parental pampering is encompassed by a variety of parenting behaviors (Dreikurs, 1948) and, although common methods of

pampering have been defined in the literature (Kaplan, 1985), researchers have yet to test these behaviors empirically. Enabling, autonomy granting, parental care, and parental behavioral control are measurable constructs that suitably fall within the definition of parental pampering, as they are behaviors that may inhibit children's development of independence, autonomy, and sense of responsibility for themselves and their behaviors (Kaplan, 1985).

In the addictions literature, enabling refers to behaviors that support another's continued use of substances by protecting the individual from consequences that result from the substance abuse (Doweiko, 2009). Parental enabling behaviors are more generalized and have been defined as behaviors that rescue the child from age-appropriate responsibilities and the resulting consequences from not maintaining those responsibilities, thus reinforcing irresponsible and dependent behavior (Lynch, Hurford, & Cole, 2002). Parents may pamper their children by protecting them from experiencing, and thus learning from, consequences related to negative behaviors, such as substance abuse. Additionally, parents who demonstrate low levels of autonomy granting may further prevent children from necessary learning experiences by hindering their ability to act independently and make their own decisions. Autonomy granting is defined as behaviors that promote independence and decision-making in a child (Kunz & Grych, 2013). Thus, low levels of autonomy granting may promote dependent behaviors, a characteristic of the pampered lifestyle (Dreikurs, 1990). Enabling and autonomy granting often originate from a desire to help the child (Arnold, 1987; Kaplan, 1985), a function of a parent's level of care. Parental care, on the other hand, refers to the level of

availability and responsiveness a parent exerts towards the child (Biggam & Power, 1998). Parents who are overly responsive and cater to their children, fail to encourage some level of autonomy, and indulge their children by giving them too much, too often are considered to pamper their children (Kaplan, 1985). Furthermore, parental behavioral control is measured on a spectrum from neglect to overprotection and describes the level of intervention a parent employs in a child's life (Biggam & Power, 1998). Parents who demonstrate high levels of control are often overly permissive by failing to set and enforce limits (Biggam & Power, 1998; Yahav, 2006), another example of a method of parental pampering (Kaplan, 1985).

Although researchers have theoretically identified each of these parenting behaviors as examples of parental pampering (Kaplan, 1985), to date, no research exists that combines enabling, autonomy granting, parental care, and parental behavioral control into a larger construct. For this reason, empirical evidence is needed to test the accuracy of defining parental pampering using these parenting behaviors. Similarly, although researchers have discussed the potential detrimental effects of parental pampering on child outcomes (Dreikurs, 1990; Keene & Wheeler, 1994), research has not been conducted examining direct relationships between perceptions of parental pampering and substance abuse (see the lower portion of Figure 1 for the relationship between the observed and latent constructs of parental pampering, and the relationship to substance abuse).

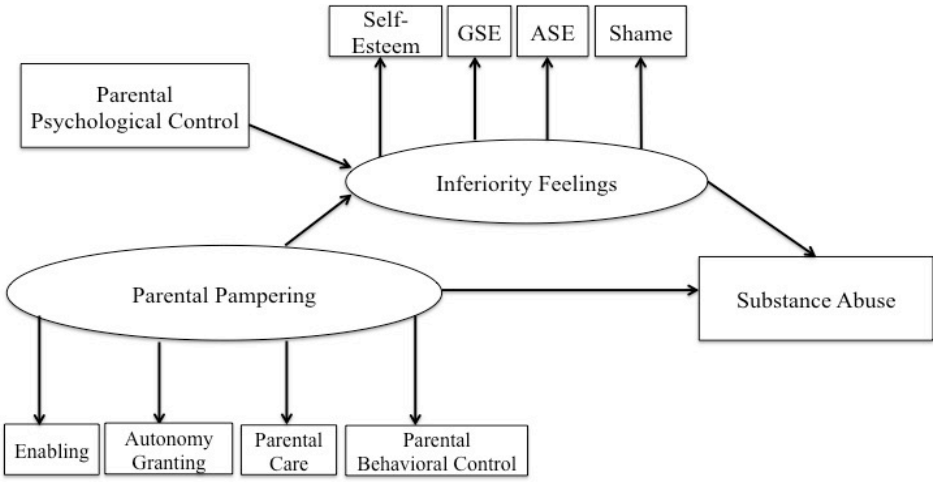


Figure 1. Proposed Model Examining Definitions of the Latent Structures (Parental Pampering and Inferiority Feelings) and Direct Relationships Between Perceptions of Parental Pampering, Perceptions of Parental Psychological Control, Inferiority Feelings, and Substance Abuse.

In addition to parental pampering, parental psychological control is an important parenting behavior to consider when understanding the impact of parenting factors on substance abuse. Whereas parental behavioral control includes the level of behavioral intervention a parent exercises over a child's behavior, psychological control refers to a parent's attempts to control a child's behavior through manipulation of the child's thoughts and emotions (Barber, 1996; Kakihara & Tilton-Weaver, 2009). Researchers posit that these different forms of parental control negatively impact children; however, they suggest that children who perceive higher levels of parental behavioral control demonstrate more externalizing symptoms, whereas children who perceive higher levels

of parental psychological control display more internalizing symptoms (Barber, Olsen, & Shagle, 1994). If this proposition is true, it may be assumed that perceptions of parental behavioral control (a factor in parental pampering) impacts substance abuse, while parental psychological control affects negative feelings about the self, a concept Adler referred to as inferiority feelings.

Although a pampered lifestyle is one theoretical connection to substance abuse, Adler also attributed substance abuse to feelings of inferiority (Dreikurs, 1990), which arise when individuals are not able to achieve feelings of competence, significance and belongingness, a task Adler referred to as striving for superiority (Mosak & Maniacci, 1999). Individuals who question their abilities and effectiveness may carry an overarching sense of inferiority about the self (Dreikurs, 1990; Mosak & Maniacci, 1999). Inferiority feelings are subjective evaluations about the self (Mosak & Maniacci, 1999) which, when culminating in feelings of distress, may manifest as an inferiority complex (Dreikurs, 1990). In theory, use of substances may be viewed as an unhealthy coping response for feelings of inferiority (Adler, 2005); however, empirical support for this relationship is absent in current research.

One researcher suggested there exists a dearth of information on the effects of inferiority feelings on adjustment and behavior (Gupta, 1996). A possible explanation for this lack of empirical evidence relates to the difficulty in defining the construct (Strano & Dixon, 1990). Dreikurs (1990) defined inferiority feelings as overwhelming feelings of low self-esteem, self-doubt, and not feeling accepted. Yet there exists a lack of empirical evidence validating this theoretical definition. Strano and Dixon (1990) agreed that

inferiority feelings are comprised of multiple constructs, and suggested that using measures of self-esteem to investigate inferiority feelings may not be adequate, as self-esteem may only partially describe inferiority feelings. Individuals may experience self-doubt when they lack confidence and efficacy in their abilities. Similarly, feelings of shame can lead to a difficulty in accepting oneself as worthy (Tangey & Dearing, 2002). Individuals who have difficulty accepting themselves may also have difficulty feeling accepted by others. As such, examining self-efficacy (both general and task-specific) and shame may add to the understanding of the complex nature of inferiority feelings.

Self-efficacy is a cognitive process that describes an individual's confidence in performing a specific ability (Bandura, 1977). Self-efficacy is described as a trait-like belief in one's overall competence and a belief in one's competence related to a specific task (Judge, Erez, & Bono, 1998). Researchers have explored self-efficacy as it relates to specific tasks and situations, as well as general self-efficacy (Scherbaum, Cohen-Charash, & Kern, 2006). General self-efficacy (GSE) is defined as an individual's perception of their ability to perform across a variety of situations (Judge et al., 1998). Individuals who hold negative self-evaluations of themselves, experienced as inferiority feelings, may struggle to believe in their own efficacy. In the case of substance abuse, individuals with low abstinence self-efficacy (ASE) may have little confidence in their ability to abstain from substance abuse in high-risk situations (Burleson & Kaminer, 2005). Additionally, researchers report a correlation between task specific and general self-efficacy (Scherbaum et al., 2006), suggesting individuals with low ASE may also experience low GSE. Although the connection between negative self-evaluations and

self-efficacy is explicit, more research is needed to examine the effectiveness in describing inferiority feelings using self-efficacy.

Shame is another emotion based on negative self-evaluations about one's identity (del Rosario & White, 2006). Individuals experience shame when there exists a discrepancy between who they believe they are and who they believe they should be (Tangey & Dearing, 2002). This disparity can lead to feelings of incompetence (del Rosario & White, 2006), an essential component of inferiority feelings (Dreikurs, 1990). According to Tangey and Dearing (2002), the concept of shame is rooted in the construct inferiority; however, there lacks a universal definition of shame (Rizvi, 2010), making empirical research on its relationship to inferiority difficult. Refer to Figure 1 to see the observed constructs of self-esteem, GSE, ASE, and shame representing the latent variable of inferiority feelings, and the overall relationship to substance abuse.

Theoretically, substance abuse seems to be a mechanism resulting from the pampered life style and inferiority feelings (see Figure 1; Adler, 2005; Dreikurs, 1990), indicating that perceptions of the behavior of others (e.g., perceptions of parenting behaviors) coupled with thoughts and feelings about the self may play an integral role in substance abuse. Utilizing an Adlerian framework delineates the importance of examining how an individual's perceptions of the environment may impact thoughts and feelings about the self (Mosak & Maniacci, 1999). In theory, early experiences and relationships within the family environment are essential to an individual's development; however, the theoretical significance of perceptions suggests that perceptions of these experiences, rather than the reality of the experiences, may be of particular import in the

development of a pampered lifestyle, inferiority feelings, and subsequent substance abuse (Strano & Dixon, 1990).

Statement of the Problem

The concerning rates of substance abuse are well-documented; however, an increased number of researchers have turned their attention to the distinct period between adolescence and adulthood that appears to be particularly vulnerable to substance abuse (SAMHSA, 2013). Substance related problems are now thought to be, at least in part, developmental in nature (Wilens & Rosenbaum, 2013), and often begin in adolescence or early adulthood. Early experimentation with substances does not always lead to a substance use disorder; however, researchers have found that 75% of individuals diagnosed with clinically significant substance related problems began using prior to age 25 (Pottick et al., 2014; Wilens & Rosenbaum, 2013). Researchers have suggested that early patterns of substance abuse can lead to more problematic use into adulthood (Bolkan, et al., 2010), highlighting the value of early intervention and treatment, specifically during the transitional ages between 16 and 25. In addition, many individuals enter the transitional age with pre-existing substance related problems (Pottick et al., 2014), and those who do may be even less prepared to meet the challenges that accompany this phase of life (Davis, 2003). TAY consistently report the highest rates of illicit substance use (SAMHSA, 2013), suggesting early intervention may be key in preventing and treating substance abuse among this population; however, in order for early intervention strategies to be effective, researchers and clinicians must first understand what factors need to be the focus of the interventions.

Researchers who attempt to intervene and treat substance abuse in TAY recognize the challenge in incorporating family factors into their investigation (Davis, 2003; Wilens & Rosenbaum, 2013). On the one hand, many TAY are no longer residing with their family of origin, and are working to gain independence in meeting the demands of adulthood (Wilens & Rosenbaum; 2013), while, on the other hand, families continue to act as a resource for TAY, albeit to varying degrees (Davis, 2003). Many TAY experience a shift in focus from family relationships to more complex peer relationships (Davis & Vander Stoep, 1997), and for this reason, researchers often emphasize the importance of peer influences on substance abuse in this age group by examining a college population (Borsari & Carey, 2001); however, perceptions of family factors such as parenting behaviors are largely ignored in this research.

Adlerian theory emphasizes the importance of perceptions of early experiences on personality and current functioning (Mosak & Maniacci, 1999), highlighting that these perceptions should not be disregarded when examining substance abuse in TAY. According to Adler, perceptions of the family environment and relationships play a significant role in the development of thoughts and feelings about the self (Dreikurs, 1990). The way in which parents are perceived to behave towards their children can influence feelings of competence and significance, which, when not sufficient, leads to feelings of inferiority (Dreikurs, 1990). From an Adlerian perspective, use of substances is often a manifestation of these inferiority feelings (Adler, 2005), which may be a result of specific parenting behaviors, such as pampering. Individuals who perceive pampering parenting behaviors and who experience inferiority feelings may have earlier onset of

substance abuse due to these perceptions and feelings throughout their childhood. This may explain substance abuse amongst the TAY population as a function of perceptions of family factors, rather than a function of peer influences, such as social norms, highlighting the importance of incorporating family factors into research and intervention with this population.

One potential explanation for the omission of perceptions of parenting factors and the utilization of an Adlerian framework when examining substance abuse in college populations may be due to a clear lack of understanding of the constructs that make up the latent structures of parental pampering and inferiority feelings. Although researchers have proposed definitions of Adlerian constructs such as pampering and inferiority, no empirical research exists to properly define and measure these constructs. Furthermore, because of the lack of universal definitions and adequate methods of measuring pampering and inferiority, researchers have been unable to adequately utilize Adlerian theory to investigate relationships between parental pampering, inferiority feelings, and substance abuse. Adlerian theory may provide a framework that fills a gap in current knowledge and understanding of substance abuse in TAY by examining relationships between parental pampering, inferiority feelings, and substance abuse; however, empirical validation of the constructs pampering and inferiority is also a necessary step in investigating these relationships.

Purpose of the Study

The purpose of this study is two-fold. The first purpose is to test the accuracy in measuring the latent structures using the observed constructs. More specifically, the

proposed model will investigate whether parental pampering is accurately measured using the variables of enabling, autonomy granting, parental care, and parental behavioral control and whether inferiority feelings are accurately measured using the variables of self-esteem, GSE, ASE, and shame. Although parental pampering and inferiority feelings have been theoretically defined (Dreikurs, 1990; Kaplan, 1985; Mosak & Maniacci, 1999), to date no researchers have provided empirical definitions of the constructs.

A second aim of the study is to test a proposed model of the relationship between perceptions of parenting behaviors and substance abuse in TAY utilizing a college population. The prevalence of substance abuse in the TAY population has been readily identified (SAMHSA, 2013); however, no research has examined the relationship between perceptions of parenting behaviors and subsequent substance abuse in TAY. Using Adlerian theory as a framework for the proposed model, and assuming the observed variables adequately measure the latent structures, the relationship between parental pampering, inferiority feelings, and substance abuse will be examined. If the observed variables do not accurately measure the latent structures, direct relationships between the observed variables and substance abuse will instead be explored. Additionally, the relationship between parental psychological control and inferiority feelings and the mediating relationship of inferiority feelings on substance abuse will be investigated. According to Adlerian theory, substance abuse may be a coping response that results from feelings of inferiority that arise due to perceptions of the family environment (Adler, 2005; Dreikurs, 1990). Thus I will attempt to validate this assertion

using the proposed mediating relationship in the model (Figure 1). Identifying the potential relationships between parenting behaviors, inferiority feelings, and substance abuse in TAY will contribute to the development of prevention and treatment interventions that address the impact of parenting behaviors on substance abuse.

Need for the Study

The transitional ages between 16 and 25 are fraught with challenges that lead these individuals to consistently report the highest rates of illicit drug use and binge drinking (SAMHSA, 2013). Additionally, TAY are more likely to experience increased challenges in school completion, employment, social involvement, independent living and functioning, experience lower income, poorer physical health, and higher rates of criminal involvement (Davis & Vander Stoep, 1997). Despite this data, TAY experience a host of institutional barriers to receiving needed services (Davis, 2003). Treatment services for TAY offer unique challenges in that many of these individuals are too old for child services, but may not be developmentally prepared for adult services (Kenney & Gillis, 2008). Moreover, the ability of existing services to meet the individualized needs of individuals in transition is lacking (Davis et al., 2006).

Currently, researchers do not know if differences exist between TAY who received services as adolescents and those who did not; however, it is possible that parenting behaviors that impact substance abuse in this population may increase in response to the knowledge that their child is using. Determining if relationships between parenting behaviors and substance abuse in TAY are stronger for individuals who were in treatment as adolescents may inform the way in which services are provided to

adolescents. Individuals who provide substance abuse treatment, such as counselors, can utilize this knowledge to address perceptions of parenting behaviors in treatment as an early intervention strategy while child services as still more easily accessible. Additionally, many TAY are at an age where they can refuse to involve parents in services; however, many still rely on parents as a resource (Davis, 2003). The level of involvement parents provide to TAY and the lack of parental involvement in treatment services add another layer of disparity in effective treatment. Research that investigates the impact of parenting factors on substance abuse in TAY is necessary to bridge the gap between parental influence on TAY outcomes and lack of parental involvement in treatment. For example, knowledge that perceptions of parenting factors impacts abuse of substances for TAY will allow counselors who provide services to TAY, such as college counselors, to address these perceptions with the individual despite parental presence in treatment.

Identifying relationships between perceived parenting behaviors, inferiority feelings, and substance abuse provides an understanding of the extent to which perceived family dynamics impact substance abuse. Having a better understanding of these relationships will allow researchers and practitioners to develop more effective treatment strategies in two ways. First, early intervention strategies can target families, rather than individuals. Incorporating parents into treatment services can influence change within the family system rather than change within the individual, and can provide increased support to individuals entering the transitional age. This increased support may prove a protective factor against the vulnerability of substance abuse in the TAY population.

Second, if relationships are found between perceptions of parenting behaviors and substance abuse in TAY, practitioners working with this population can provide more comprehensive treatment by addressing family factors in addition to peer influences, even when families are unwilling or unable to participate in treatment.

Research Questions

The purpose of this study is to examine the relationships between parental pampering, parental psychological control, inferiority feelings, and substance abuse. In order to investigate potential relationships, the following research questions will be addressed:

Research Question 1: Do the observed constructs of enabling, parental care, and parental behavioral control measure the latent construct of parental pampering?

Research Question 2: Do the observed constructs of self-esteem, self-efficacy, and shame measure the latent construct of inferiority feelings?

Research Question 3: What is the relationship between perceptions of parental pampering, perceptions of parental psychological control, inferiority feelings, and substance abuse?

Research Question 4: Do inferiority feelings mediate the relationship between perceptions of parental pampering and substance abuse?

Research Question 5: Are there differences in the strength of relationships within the proposed model for those who have ever received treatment for substance abuse and those who have not?

Definition of Terms

In the current study, the constructs are operationalized using the following definitions:

Parental pampering is a parenting behavior in which parents do for the child what the child could do for himself (Arnold, 1987; Mosak & Maniacci, 1999). For the purposes of this study, parental pampering is hypothesized to be defined by the observed constructs of enabling, autonomy granting, parental care, and parental behavioral control.

Enabling is defined as behaviors that rescue a child from age-appropriate tasks and responsibilities and the resulting consequences from not upholding those tasks and responsibilities (Lynch et al., 2002).

Autonomy granting refers to parenting behaviors that promote independence and decision making in the child (Kunz & Grych, 2013).

Parental care is the level of availability and responsiveness a parent demonstrates towards a child (Biggam & Power, 1998).

Parental behavioral control is the level of behavioral intervention and regulation a parent exert over a child's behavior (Barber et al., 1994; Biggam & Power, 1998).

Parental psychological control is the level of intrusiveness a parent imposes on the psychological and emotional development of the child (Barber, 1996).

Inferiority feelings are feelings that arise in response to an individual's evaluations of the self as incapable or ineffective (Dreikurs, 1990; Mosak & Maniacci, 1999). For the purposes of this study, inferiority feelings are hypothesized to be defined by self-esteem, GSE, ASE, and shame.

Self-esteem is a positive or negative belief or attitude about the self as worthy or unworthy (Baumeister, 1998; Rosenberg, 1965).

General self-efficacy (GSE) is defined as an individual's perception of their ability to perform across a variety of different situations (Judge et al., 1998).

Abstinence self-efficacy (ASE) is a cognitive process that describes an individual's confidence in performing a specific ability (Bandura, 1977). For the purposes of this study, self-efficacy will be related specifically to an individual's confidence in the ability to maintain abstinence in high-risk situations (Burleson & Kaminer, 2005).

Shame is an enduring, chronic sense of inferiority, inadequacy, or deficiency that has become internalized as part of one's identity (Tangey & Dearing, 2002).

Substance abuse is defined in two ways in the current study. One definition includes a problematic pattern of risky alcohol use resulting in failure to fulfill role obligations, use in physically hazardous situations, substance-related legal problems, and/or continued use despite recurrent social or interpersonal problems (APA, 2000). A second definition is a problematic pattern of drug use, including the use of prescription medications other than as directed or any non-medical use of drugs (Skinner, 1982), resulting in failure to fulfill role obligations, use in physically hazardous situations, substance-related legal problems, and/or continued use despite recurrent social or interpersonal problems (APA, 2000).

Transition-age youth (TAY) is individuals between the ages of 16 and 25 (Kenney & Gillis, 2008). For the purpose of this study, only TAY 18 years old and over will be included.

Overview

This study is presented in five chapters. The first chapter has included a summary of the problem, as well as a brief description of research related to TAY, substance abuse, parenting behaviors, and Adlerian theory. Additionally, Chapter One provided a statement of the problem, the purpose and need for the study, a definition of terms, and the research questions that will be addressed. Chapter II will expand upon the related research that exists related to Adlerian theory and the key constructs examined in the study. This explanation will include research related to parental pampering (enabling, autonomy granting, parental behavioral control, and parental care), parental psychological control, inferiority feelings (self-esteem, GSE, ASE, and shame), TAY, and substance abuse. Chapter III will describe the methodological approach and data analysis that will be utilized in the study. The research hypotheses, sample description, instrumentation employed, and data collection procedures will also be outlined. Chapter IV will present the results of the study. Finally, Chapter V will provide the conclusions derived from the study, a discussion of the implications for professional counselors working with TAY who abuse substances, and recommendations for future research.

CHAPTER II

REVIEW OF RELEVANT LITERATURE

Chapter I presented the purpose of the current study, as well as specific research questions that will be addressed. Chapter II examines a review of the pertinent literature related to substance abuse in TAY and parenting behaviors that influence the rates of substance abuse in this population. The scope of the substance abuse problem in TAY and barriers to providing adequate treatment services for this population are outlined, including an exploration of the lack of focus on family factors, despite their potential impact. Additionally, an overview of Adlerian theory and the value some of the major tenets, such as pampering and inferiority feelings, in conceptualizing and treating substance abuse in TAY is presented. Research related to Adlerian concepts and examining the impact of parenting behaviors on substance abuse is outlined, highlighting the lack of empirical exploration of definitions of pampering and inferiority feelings, as well as the lack of examination of direct relationships between parental pampering, parental psychological control, inferiority feelings and substance abuse. Furthermore, theoretical connections linking enabling, autonomy granting, parental care, and parental behavioral control to pampering and linking self-esteem, general self-efficacy (GSE), abstinence self-efficacy (ASE), and shame to inferiority feelings are argued using relevant literature, and the lack of empirical exploration of these connections is emphasized. The chapter concludes with a summary of the review of relevant literature.

Transition-Aged Youth

The 21st Century has seen a shift in the manner in which adolescents transition into young adulthood. Whereas in years past, societal trends were such that the majority of individuals had completed their education and started careers and families by their early 20's (Furstenberg, 2010), more recent trends are such that many individuals transitioning from adolescence to young adulthood are less likely to be living independently and are more likely to prolong completion of education, entering the workforce, and beginning a family of their own (Fingerman et al., 2012; Sussman & Arnett, 2014); despite continued societal expectations that these tasks be accomplished (Davis et al., 2006). Western cultural expectations are such that in order to successfully migrate into adulthood, adolescents must complete school, find satisfying work, form adult friendships and intimate relationships, vote and participate as a citizen, and support a household (Davis & Vander Stoep, 1997); however, the meaning behind these responsibilities for TAY in today's society looks considerably different, with many individuals in their late teens and early twenties viewing these expectations as obligations to be avoided (Arnett, 2005). Further, the perception that one has transitioned to adulthood is associated with decreased substance use as use of substances is often in conflict with the attainment of adult goals (Staff, Greene, Maggs, & Schoon, 2013), suggesting that because of the increased rates of substance use in the TAY population, these individuals may not view themselves as having reached adulthood.

Although the age of 18 legally signifies entrance into adulthood, the change in priorities from late adolescence to early adulthood suggests a need to examine this life

period in a different light. As such, researchers have coined the term transition-aged youth (TAY) to describe individuals between the ages of 16 and 25 (Kenney & Gillis, 2008) who are immersed in this transitional phase, and have turned their attention to TAY as this period is characterized by developmental considerations that may improve our understanding of and ability to effectively address mental health and substance related concerns (Davis et al., 2006; Pottick et al., 2014; Wilens & Rosenbaum, 2013).

Substance Abuse

Substance abuse is particularly relevant when discussing TAY outcomes, as substance use disorders are among the most common diagnoses in this population (Davis, 2003; Davis & Vander Stoep, 1997; Manteuffel, Stephens, Sondheimer, & Fisher, 2008). Substance abuse is one of two categories (along with substance dependence) of substance use disorders that includes a pattern of risky alcohol or drug use resulting in failure to fulfill role obligations, use in physically hazardous situations, substance-related legal problems, and/or continued use despite recurrent social or interpersonal problems (APA, 2000). Because alcohol is a legal substance for individuals over the age of 21, drug abuse is additionally defined as a problematic pattern of drug use, including the use of prescription medications other than as directed or any non-medical use of drugs (Skinner, 1982). Mental health professionals use these criteria, set forth by the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV-TR), to diagnose and treat substance abuse. Recently, in the fifth edition of the DSM (DSM-5), the diagnoses of substance abuse and substance dependence were removed and replaced with substance use disorders, in which individuals are evaluated on a severity continuum based on number of

criteria rather than placing them into a diagnostic category of abuse versus dependence (APA, 2013). Despite these changes; however, researchers and clinicians continue to use the language of substance abuse as many have not yet adopted the new edition of the DSM, and many assessment instruments were developed based on the criteria for substance abuse and substance dependence.

Organizations such as NIDA and SAMHSA are dedicated to examining and documenting rates of substance abuse, using the above criteria. Documenting the current prevalence of substance abuse, both organizations demonstrate that substance abuse is a widespread concern in today's society. Specifically, approximately 24.6 million Americans (or 9.2%) aged 12 or older report use of an illicit substance in the past month in 2013 (NIDA, 2014), a number that increased from 23.9 million in 2012 (SAMHSA, 2014). These alarming trends are particularly concerning in TAY, as 16.6% of individuals aged 16 to 17, 23.9% of those aged 18 to 20, and 19.7% of people aged 21-25 reported illicit drug use and approximately 40% reported engaging in binge-drinking within the past month (NIDA, 2014; SAMHSA, 2013). These rates are consistently higher than other age groups (NIDA, 2014; Pottick et al., 2014), and in fact, the most common diagnosis amongst individuals aged 17 to 25 is reported to be substance use disorders (Davis & Vander Stoep, 1997). As TAY move away from the dependency and monitoring of adolescence, they also do not yet feel the weight of adult responsibilities (Sussman & Arnett, 2014), leaving them more susceptible to risky behaviors, such as abuse of substances. These realities lead researchers to wonder what factors may be at play in influencing this trend.

Developmental Considerations

Because TAY are considered a population at risk for increased substance abuse problems (NIDA, 2014; Pottick et al., 2014; Wilens & Rosenbaum, 2013), understanding the unique challenges present during this time period may help researchers and clinicians to more effectively intervene and treat substance abuse. As such, researchers are exploring factors that are believed to influence the use of substances in TAY. These researchers highlight the developmental transitions associated with the period between adolescence and adulthood, noting the biological, interpersonal, and intrapersonal factors associated with TAY that influence the development of substance abuse problems (Davis, 2003; Davis & Vander Stoep, 1997).

Identity formation. TAY is a period of significant identity formation (Davis, 2003). In other words, one task of TAY is to develop and foster an individual identity as they progress through a journey towards independence. According to Erik Erikson's theory of psychosocial development, individuals during this developmental period are tasked with overcoming the crisis of identity versus role confusion (Feldman, 2005). More specifically, the period of identity formation allows individuals to take more responsibility for who they are as an individual by decreasing levels of dependence on families of origin and navigating the path towards independence by assuming new, more adult roles (Santrock, 2008). Erikson posited this developmental stage typically occurs from ages 12 to 18 (Feldman, 2005); however, recent shifts in the process of transitioning to adulthood lead researchers to believe the development of identity, and move towards independence, may in fact last into early adulthood (Fingerman et al., 2012). In fact, one

modern researcher who examines this life period has identified features characteristic of TAY that are similar to, but distinct from those outlined by Erikson. Arnett (2007) refers to this stage of emerging adulthood as the age of identity exploration, the age of instability, the self-focused age, the age of feeling in-between, and the age of possibilities and discussed that each of these characteristics may influence the increased rates of substance abuse in the TAY population. Substance abuse may be a method in which TAY can insure a range of exciting experiences prior to settling down. On the other hand, substance abuse may be an effective coping mechanism for the range of emotions related to finding oneself. Further, the increased freedom and potential lack of responsibilities during the transitional ages allows for increased use of substances, and the feeling of being between adolescence and adulthood may lend individuals to feel as if using substances is more acceptable (Arnett, 2005).

According to Pottick et al. (2014), the clear distinction between the end of adolescence and the beginning of young adulthood at age 18 is no longer an accurate depiction of the experience of the transition from adolescence to young adulthood, as evidenced by increased pursuit of postsecondary education, a rise in the median age of marriage, and a trend towards using the early 20's to experiment with careers and opportunities (Arnett, 2007). Individuals from 16 to 25 (TAY), although attempting to navigate the independence of adulthood, continue to experience biological and social challenges that characterize adolescence (Pottick et al., 2014). This may be due, in part, to the changing timeline of completing educations, jumpstarting a career, and beginning a family (Fingerman et al., 2012); however, it could also be a function of a change in

perspective regarding the way in which we view the biological and interpersonal challenges that exist during this period.

Cognitive and moral development. One of the hallmarks of TAY is the experience of concurrent developmental transitions, making this period especially challenging to navigate (Pottick et al., 2014; Wilens & Rosenbaum, 2013). TAY experience changes in cognitive, moral, social and sexual development in addition to their search for identity formation (Davis, 2003). Cognitive and moral development are essential characteristics of adolescence and early adulthood. Individuals in early adolescence continue to utilize more concrete thought processes, which makes abstract concepts, such as planning for the future, and moral reasoning more difficult (Davis, 2003). The ability to think more abstractly in the later years of this developmental phase could impact the trend towards prolonging tasks related to the future, such as education completion, career decision-making, and beginning a family.

The transitional period is a time when risky behavior is most tolerated, and many TAY may use this social acceptance as an excuse to ignore their emerging moral reasoning (Sussman & Arnett, 2014). Furthermore, because TAY are immersed in a time of self-focus (Arnett, 2007), their expectations of consequences can significantly impact their choice to use substances. TAY may not have developed the cognitive and moral capabilities of thinking about long-term, abstract consequences. Researchers report that perceptions of consequences to substance abuse as positive or negative significantly predicts use of substances, for example, in a sample of University students, only evaluations related to alcohol use as fun were rated positively, whereas evaluations

related to relaxation, image, sex, and physical/behavioral consequences were rated as neutral (Patrick & Maggs, 2011). This suggests that college students continue to drink alcohol, despite not necessarily expecting positive consequences related to their use, which may be related to immature cognitive and moral development.

Biological development. As individuals begin to traverse the multiple roles expected in adulthood (e.g. vocational, romantic, peer, family) (Santrock, 2008), biological changes that occur during this developmental timeframe impact the ability to cope with and manage these roles (Wilens & Rosenbaum, 2013). Individuals in the beginning stages of TAY do not have fully developed brains, leaving them vulnerable to limitations in functioning and increased risks of negative consequences associated with these functional limitations (Wilens & Rosenbaum, 2013). More specifically, TAY are expected to begin the transition into independent functioning, including autonomous decision-making; however, the processes in the brain involved in decision-making may not be fully functional at this developmental stage (Wilens & Rosenbaum, 2013), suggesting TAY are expected to fulfill responsibilities their brains may not be ready to accomplish.

The limbic system, which is responsible for reward-based motivations and emotion regulation develops early in adolescence, whereas the frontal lobe, which is responsible for processing, inhibition, and decision-making develops later (Casey, Getz, & Galvan, 2008). This reality explains the biological possibility that younger TAY may be more susceptible to risk taking behaviors, emotional decision-making, and decision-making based on the propensity towards perceived rewards, all of which have the

potential to increase abuse of substances. In turn, abuse of substances is known to further impede impulse control (Davis & Vander Stoep, 1997), making the relationship between impulse control and substance abuse a reciprocal process. Although it is possible that as the brain continues to develop, TAY outgrow the potential for risk-taking and emotional decision-making behaviors, early abuse of substances that occurs as a result of the underdeveloped brain processes could damage brain development that typically transpires throughout TAY development. In fact, although early experimentation with substances does not guarantee future substance abuse problems, 75% of individuals who are diagnosed with substance related problems reported they began using prior to age 25 (Pottick et al., 2014; Wilens & Rosenbaum, 2013). Early onset of substance abuse may impact brain development in such a way that discontinuation of use becomes more difficult once the brain has fully matured.

Psychosocial development. In addition to biological changes that occur, TAY also experience a host of psychosocial transitions. As TAY attempt to formulate an adult identity, they continue to experience the social challenges of adolescence (Pottick et al., 2014; Wilens & Rosenbaum, 2013). These individuals are in a place of limbo that requires them to balance adult demands with adolescent challenges, a task that is made more challenging due to social immaturity (Davis, 2003). TAY in the midst of adolescent social challenges, including peer pressure, initiation of romantic relationships, and developing roles within friend groups and families, lack previous experiences from which to draw upon when managing these multiple demands (Davis, 2003). The lack of monitoring during a time when opportunities are open for TAY can be exciting, and in

fact, Arnett (2007) suggests that in a majority of research that has examined TAY, participants identified overall positive consequences during this period (e.g., increased self-esteem). Risky behaviors may result from this excitement, increased self-esteem, and positive experiences (Sussman & Arnett, 2014); however, the endless possibilities can also be overwhelming, which can lead to substance abuse as a coping mechanism (Peterson & Leffert, 1995). While on the one hand, TAY are expected to develop independence and autonomy, they are also expected to develop and foster more complex relationships, two demands that can appear to conflict with one another as developing autonomy promotes independence from others; whereas fostering complex relationships promotes connection to others. In response to these potentially conflicting demands, TAY may differentiate from the family of origin as a strategy of meeting the demand for independence, while focusing on cultivating peer connections to achieve more complex relationships (Davis, 2003; Wilens & Rosenbaum, 2013).

Changing peer relationships. The social immaturity that characterizes many TAY lends itself to a desire to fit in with peers (Davis, 2003). As such, the ability of TAY to develop and maintain multifaceted relationships rests largely on peer relationships. Researchers who subscribe to psychosocial models of substance abuse assert that social contexts, such as peer influences play a significant role in the development of substance related problems (Cook, 2001). Many researchers who examine substance abuse within the TAY population focus strongly on peer influences as an important factor in explaining substance related problems amongst this population (Borsari & Carey, 2001), for example, the accessibility of substances due to peer use

during this period of life, may increase the prevalence of substance abuse amongst TAY (Sussman & Arnett, 2014). The shift in focus towards peer relationships and the desire to increase independence highlight the changing family relationships that are apparent in TAY (Davis, 2003; Wilens & Rosenbaum, 2013).

Changing family relationships. Differentiation from family has been identified as one of the main tasks of TAY (Wilens & Rosenbaum, 2013); however, this task is made more difficult with the changing timeline of this developmental period (Furstenburg, 210). As many TAY have yet to complete their education and begin careers and families of their own (Fingerman et al., 2012), they may not have reached financial independence, leading for continued reliance on families as a financial resource (Davis, 2003; Furstenburg, 2010; Mares & Jordan, 2012). Additionally, the experience of multiple transitions during this time period can have an emotional impact on TAY, and families, who are many times an individual's first experience of nurturing and emotional support, continue to be an outlet for TAY to obtain needed emotional support (Davis, 2003; Kenney & Gillis, 2008; Mares & Jordan, 2012).

This continued reliance on families can prove to be a difficult transition for both TAY and their families as the system attempts to reassess and adjust to changing roles (Wilens & Rosenbaum, 2013). Researchers report that in the United States, approximately half of TAY over the age of 18 still reside with their parents (Furstenburg, 2010), however, the structure and dynamics of relationships may be different than during childhood and adolescence. Parents must learn to balance promotion of autonomy with continuing to act as a safety net for their children, which is made more difficult by TAY

navigation of balancing autonomy seeking with utilizing family as a resource (Davis, 2003). The amount of reliance a TAY requires from parents varies, just as the amount of assistance a parent provides varies. Some TAY look to parents as a strong presence in their lives for guidance in challenges such as decision-making, financial assistance, and emotional support (Mares & Jordan, 2012), whereas others attempt to manage these challenges independently. Similarly, the degree to which parents provide support can vary based on how willing and able parents are to provide resources to children in this developmental transition. Parents often hold a strong investment in assisting their children in achieving successful outcomes; however, when parents become overly involved and begin to push specific identities on their adolescent, the adolescent is at an increased risk of developing identity confusion as they may perceive that they do not have enough room to adequately explore identities (Santrock, 2008), a frustration that can lead an individual to turn to substances as a way of coping. Despite the fluctuating levels of support provided by parents during this phase, parents remain the most reliable source of assistance for TAY, as they are often the most constant factor in their lives (Davis, 2003).

Adjusting to these new needs and roles can be challenging for TAY and parents alike, particularly when the needs and wants of TAY are not congruent with parents willingness and ability to act as a resource for their children (Davis, 2003). According to Aquilino and Supple (1991), relationships between parents and TAY living at home are found to be more positive when the TAY are working towards productive goals, suggesting that parents may be more willing to provide resources to TAY when they

believe the assistance is helping TAY achieve independence, rather than hindering independence. However, the researchers examined this from the parents' perception, thus, not examining TAY perceptions of what parental behaviors equated helping versus hindering in this regard. It is possible that despite parents best intentions, specific parenting behaviors utilized to provide resources to TAY may lead to negative outcomes, such as substance abuse, when TAY perceptions are such that the behaviors are obstructive or unsupportive.

Although researchers agree that the changing relationships and roles between TAY and their parents are challenging and impactful, a majority of these reports are conceptual in nature (e.g. Davis, 2003; Furstenberg, 2010; Pottick et al., 2014). Furthermore, no empirical research has been conducted examining direct relationships between specific parenting behaviors and TAY outcomes, such as substance abuse. The majority of research that has been conducted on TAY outcomes focused on TAY with serious emotional disturbances (SED; Davis, 2003; Davis et al., 2006; Davis & Vander Stoep, 1997; Pottick et al., 2014). SED is defined as emotional or behavioral difficulties that are psychological in nature, or meet criteria for a mental illness (Davis & Vander Stoep, 1997), thus, little is known about the general TAY population or differences that may exist between TAY with mental health concerns and those without.

Regardless, researchers suggest that the host of developmental transitions experienced during TAY leaves this population at an increased risk of substance abuse (Pottick et al., 2014), as the experience of multiple simultaneous transitions can increase the risk of negative outcomes (Peterson & Leffert, 1995). However, despite the identified

increased rates of substance abuse, TAY continue to experience a variety of barriers to successful treatment (Davis et al., 2006; Manteuffel et al., 2008; Pottick et al., 2014; SAMHSA, 2014b).

Treatment Barriers

An estimated 22.7 million Americans over the age of 12 met criteria for a substance use disorder indicating a need for substance abuse treatment in 2013. Of these individuals, approximately 2.5 million sought and received treatment, leaving roughly 20.2 million Americans untreated for substance related concerns (SAMHSA, 2014a). Of those not receiving treatment, 4.5% reported a perceived need for treatment (SAMHSA, 2014a), suggesting something may have been holding them back. In fact, more than one third of individuals who reported a perceived need for treatment identified seeking treatment but not receiving it, citing a lack of health insurance, inability to afford treatment, not feeling ready, and being unsure of where to find treatment as major barriers (SAMHSA, 2014a).

According to the Treatment Episode Data Set (TEDS), rates of admission to treatment for substance abuse have consistently (2002-2012) been low amongst individuals 18 to 19 years old, second only to individuals over the age of 55 (SAMHSA, 2014b). Similar trends were found in the 1999 Client/Patient Sample Survey, which demonstrated that although mental health service utilization was highest amongst 16 to 17 year olds, rates of service utilization were lowest amongst 18 to 19 year olds (Pottick et al., 2014). Reasons for this discrepancy; however, were not identified. It is possible that the normative nature of using substances during the transitional ages makes it

difficult to identify experimentation versus problem behavior (Arnett, 2005). This data is concerning considering researchers have proved that individuals in this age group report the highest rates of substance abuse (SAMHSA, 2013). Consequently, rates of treatment admission amongst individuals aged 12 to 17 and 20 to 24 are consistently high (SAMHSA, 2014). Although some of these differences in treatment admissions numbers may be due to a wider age range in the age groups directly above and below 18 to 19 year olds, it also may be possible that individuals transitioning out of adolescence and into adulthood, regardless of whether they choose to enter college, experience unique treatment barriers that negatively impact their ability to seek treatment.

In addition to the developmental transitions characteristic of the period between adolescence and young adulthood, TAY also experience institutional transitions that may impact their ability to receive adequate treatment for the challenges they experience. Institutional transitions refer to the status change that occurs in individuals as they shift from one institutional environment to another, such as the transition from legal minor status to legal adult status (Davis & Vander Stoep, 1997). The interaction between these developmental and institutional transitions is important in understanding the treatment barriers of TAY in that many TAY are not developmentally ready or are ineligible for the services that are available to them as they shift out of adolescence and into legal adulthood (Davis & Vander Stoep, 1997; Kenney & Gillis, 2008).

Institutional barriers. Because TAY experience many of the same psychosocial challenges as adolescents (Pottick et al., 2014), many individuals enter TAY with pre-existing mental health and substance abuse concerns as a result of these developmental

challenges and their ability to cope with them (Peterson & Leffert, 1995; Pottick et al., 2014; Wilens & Rosenbaum, 2013). Many of these individuals received child services for mental health or substance related concerns (Pottick et al., 2014); however, few of these individuals continue to meet qualifications for continued service support once they enter the transitional age (Davis, 2003).

On the whole, TAY are at an increased risk of developing mental health conditions, which may further impede their ability to meet societal expectations (Davis, 2003). Additionally, the experience of concurrent transitions coupled with the lack of adequate services for these transitions, TAY are at risk for challenges in school completion, employment, social involvement, independent living and functioning, experience lower income and poorer physical health than other age groups, and have higher rates of criminal involvement (Davis & Vander Stoep, 1997; Manteuffel et al., 2008), yet they continue to struggle with receiving adequate and appropriate treatment services (Davis, 2003). A majority of these authors described TAY with SED, suggesting that individuals who are in the most need of support are not getting what they need (e.g. Davis, 2003; Davis & Vander Stoep, 1997; Manteuffel et al., 2008), but also suggesting that TAY without SED are ignored in this research.

Researchers report TAY with SED are at a distinct disadvantage developmentally, making navigating this challenging period difficult (Davis & Vander Stoep; 1997; Manteuffel et al., 2008); however, other researchers recognize the struggles unique to the TAY population regardless of SED status (Pottick et al., 2014; Wilens & Rosenbaum, 2013), advocating for the need to identify, understand, and address these struggles in the

population as a whole. For example, TAY who are homeless report family conflict as the number one reason for their homelessness (Davis & Vander Stoep, 1997), however, little is known about conflict with families amongst TAY who continue to live at home. Early intervention related to this conflict could assist in decreasing the amount of homelessness amongst this population. Better understanding of the experiences of the entire TAY population can improve the way in which we provide services, not only to those with SED, but also to those without who still need support.

Researchers who examine flaws in current treatment options for TAY agree that services are lacking (Davis, 2003; Davis et al., 2006; Pottick et al., 2014). Several themes, such as difficulty trusting institutions, lack of expertise to guide services, lack of adequate continuity of care across child and adult services, and institutional supports that are not appropriate for the young-adult developmental level, have been identified as major concerns with the way in which services are provided in this population (Davis, 2003; Manteuffel et al., 2008; Wilens & Rosenbaum, 2013).

Institutional mistrust. By the time individuals reach TAY, many have some experience with treatment services, and these experiences can impact their level of trust with the system (Davis, 2003). Young individuals with a history of treatment have reported often feeling misunderstood, misinformed and/or ignored by service professionals (Davis, 2003), feelings that may deter pursuit of future services. Additionally, TAY may encounter some hesitation in being open and honest in services due to increased fear of consequences and a blurred concept of confidentiality (Wilens & Rosenbaum, 2013). Families can also play a role in the lack of trust in treatment services

in that parents who feel unjustly blamed for individual problems, do not believe adequate information is provided during services, or who feel their child is not being treated correctly, may feel a lack of confidence in treatment options (Davis, 2003). Many TAY continue to rely on families as a significant resource during the transitional years; however, this reality can confound the boundaries of confidentiality in the therapeutic relationship. TAY are at an age where they can refuse to involve parents in services (Davis, 2003); however, the continued reliance on parents as a resource may make inclusion of parents in services beneficial. Practitioners who provide these services have an added layer of ethical considerations around confidentiality in that some parents who provide support to TAY may feel the need to be included in services, while legally, TAY are not obligated to share treatment information (Wilens & Rosenbaum, 2013). These practitioners may not be knowledgeable or lack appropriate education on how to navigate these challenges to confidentiality (Wilens & Rosenbaum, 2013), also highlighting the theme of inadequate expertise in services for this population.

Inadequate service expertise. Currently, no known educational or training programs exist to train individuals to work specifically with the TAY population (Davis, 2003). Although many concepts related to adolescent development may apply to TAY, some challenges of this population are still unique and many individuals with adolescent training do not recognize the application to TAY, leaving them to be treated as adults, rather than adolescents (Davis, 2003). For example, mental health professionals who provide services for adults may need additional training on how to provide services for concerns that begin in childhood, but persist into adulthood (such as ADHD) or those that

often emerge in TAY (such as substance abuse; Wilens & Rosenbaum, 2013). Lack of expertise related to problems that develop in childhood but persist into adulthood emphasizes the lack of continuity of care between child and adult services.

Inadequate continuity of care. Criteria that meet the requirements for services vary by state (Davis, 2003), meaning, that children and adults alike are at risk of not qualifying for certain services based on the state in which they reside. Individuals who relocate during transitional years may lose availability of services, not because symptoms have changed, but simply due to their location. Additionally, many adult services exclude specific symptoms and disorders that are included in child services, such as behavior disorders and substance abuse, despite the prevalence of these amongst the TAY population (Davis, 2003; Manteuffel et al., 2008). In fact, substance abuse and dependence were one of the most common diagnoses amongst individuals aged 17 to 25, both as an independent diagnosis, or co-occurring with other mental health disorders (Davis et al., 2006; Manteuffel et al., 2008; Pottick et al., 2014), once again highlighting the lack of services is potentially due to changes in criteria in the system rather than a change in need.

In a majority of states, mental health services for children end at age 18 (Davis, 2003; Manteuffel et al., 2008). In a study where state mental health administrators participated in phone interviews regarding the availability of transitions services, such as service coordination, vocational, educational, independent living, and housing supports, and mental health and substance abuse treatment, approximately half of the adult service representatives from 41 states indicated no transition services were available (Davis et al.,

2006). On the other hand, only 26% of child service representatives reported no transition services (Davis et al., 2006), suggesting child services may see a need to provide transition services as a prevention strategy, but services become less available once individuals actually enter transitional ages. This suggests that a majority of transitional services are being offered in child services and individuals who age out of these services may no longer have access; however, interviewers asked an open-ended question about transitional services to child service representatives and provided categorical options of specific transition services offered to adult service representatives. This discrepancy in interview question format could impact the way in which representatives defined transitional programs, which could have skewed the results.

In those states who offer continued services, typically only one form of transitional service is available, often due to a lack of funding (Davis, 2003), meaning, individual needs must be prioritized in lieu of receiving services for all needs. Additionally, no state offers any transitional services past the age of 22 (Davis, 2003), leaving a proportion of TAY without service options. This cutoff can cause a discrepancy for individuals who delay meeting Western cultural expectations in support of other priorities (such as advanced education) by forcing them to choose between availability of services or continued pursuit of finding their identity at their own pace.

Services are not age-appropriate. As individuals age out of child services, those who qualify for adult services are thrust into these services with no transition. Researchers acknowledge the unique developmental level of TAY (Davis, 2003; Pottick et al., 2014; Wilens & Rosenbaum, 2013), proving the need to also acknowledge these

differences in the services provided to TAY. Child-based services are designed to work with children at their developmental level and adult-based services are designed with adult functioning in mind, resulting in neither child nor adult services addressing the specific needs of TAY (Davis, 2003; Manteuffel et al., 2008).

Mares and Jordan (2012) suggested mentoring, case management, peer support, and psychoeducation as unique service elements that may benefit TAY. Although several systems are in place to assist children with SED with the transition to adulthood (e.g., Individual's with Disabilities Education Act, The Comprehensive Community Children's Mental Health Act), many of these programs lack understanding of the unique needs of the population (Davis, 2003) and do not include services for TAY who do not qualify as SED. For example, Mares and Jordan (2012) examined five federally funded transition programs for TAY, including Temporary Assistance for Needy Families (TANF), TRIO Student Support Services (SSS), Second Chance Act (SCA), Chafee Educational and Training Vouchers (ETV), and Transitional Living Program (TLP). They found only SSS included all four elements of successful treatment interventions for TAY, while ETV did not include any of the elements, further highlighting the need to provide services that include elements that address the unique challenges of TAY.

One task of TAY includes learning to balance autonomy with seeking guidance in navigating new challenges, suggesting that services that provide this balance would be most appropriate for this population. Additionally, peer influences become more important during the TAY period, suggesting these individuals would benefit from receiving services alongside their peers; however, when placed in adult services, which

include anyone above the age of 18, TAY are often receiving services alongside individuals who are much older and with whom they cannot easily relate (Davis, 2003). When TAY perceive services to holistically address their distinct needs, they may be more willing to seek help when needed.

It is clear that TAY experience a host of transitions that make the need for adequate services imperative; however, current service options do not address these unique, developmental needs (Davis, 2003; Mares & Jordan, 2012; Pottick et al., 2014; Wilens & Rosenbaum, 2013). On the one hand, TAY with SED receive some needed support from current treatment options, but continue to lack adequate continuity of care, expertise to guide services, and age-appropriate interventions and programs (Davis, 2003; Manteuffel et al., 2008). On the other hand, TAY without SED continue to experience challenges that require services, including increased rates of substance abuse (Davis, 2003; Davis & Vander Stoep, 1997; Pottick et al., 2014); however, little is known about service options available for these individuals. For TAY without SED, parents continue to act as one of the most influential resources (Mares & Jordan, 2012); however, little is known about the direct relationships between parenting behaviors and substance abuse in this population. Because current trends are such that parents act as a stable resource for TAY (Davis, 2003; Furstenburg, 2010; Mares & Jordan, 2012), better understanding of the direct relationship between parenting behaviors and TAY perceptions of these behaviors. Particularly focusing on TAY perceptions of the parenting behaviors during adolescence, when substance abuse often begins, can provide insight into potential

explanations for increased rates of substance abuse amongst TAY and can inform best practices for providing much needed services to this population.

Parenting Behaviors and Substance Abuse

Current trends in substance abuse treatment emphasize the importance of Evidenced Based Treatments (EBTs) due to the empirical support they generate and the concrete techniques they provide (Jenson-Doss & Hawley, 2010); however, EBTs often ignore the importance of a theoretical conceptualization of a client and his/her family. In addition, a common misunderstanding related to the study of substance abuse is that prevention, intervention, and treatment of substance use and dependence only concerns the individual (Keane, 2007). The inaccuracy that substance abuse only impacts the individual can be dangerous in that it places a great deal of pressure on the individual and ignores the pain experienced by loved ones (Keane, 2007). Many researchers and clinicians posit that substance abuse and addiction is a family disease in that the changes in a family system that occur as a result of substance abuse may reinforce continued use (Perkinson, 1997). Unfortunately, there continues to be a disconnect between substance abuse treatment and family treatment (Center for Substance Abuse Treatment (CSAT), 2004). Substance abuse treatment continues to rely heavily on the individual as the identified client; whereas, family counseling aims at addressing the family relationships and processes and how they impact the family and each individual (CSAT, 2004).

Incorporation of theory into the conceptualization of the problem of substance abuse in TAY may prove valuable in more effective prevention, intervention, and treatment strategies by alleviating some of the pressure on the individual and shifting the

focus to a more holistic perspective including each impacted individual. Alfred Adler's theory of individual psychology (Adlerian theory) may prove beneficial in the treatment of substance abuse because it allows for the integration of theory and technique that can bridge the gap between incorporation of important client and contextual factors and use of concrete assessment and intervention techniques (Linkenbach, 1990). Adlerian theory highlights the importance of examining an individual within his social context, including the family atmosphere (Mosak & Maniacci, 1999). Many researchers who integrate family theory in the examination of adolescent substance abuse rely on a family systems framework to explore how each member of the family system impacts and is impacted by each other family member (Church, MacNeil, Martin, & Nelson-Gardell, 2009; Xiamei & Slesnick, 2011). On the other hand, Adlerian theory may be a valuable lens from which to examine substance abuse in TAY because it provides a more holistic perspective that emphasizes both the individual and the family system by identifying the individual as primary, and indicates the individual is best understood within the secondary family system context (Mosak & Maniacci, 1999).

An Adlerian Perspective on Substance Abuse

Researchers highlight the importance of examining family factors that influence substance abuse because of the significant influence families are thought to have on child development (Peterson & Leffert, 1995). For this reason, in the case of substance abuse in TAY, Adlerian theory may be particularly useful, as it emphasizes early experiences, specifically within the family environment (Mosak & Maniacci, 1999). Whereas family systems theorists believe the individual is secondary to the system (Corsini & Wedding,

2008), Adler believed that individuals help create the system (Mosak & Maniacci, 1999). In the context of substance abuse in TAY within the family environment, it may be fruitful to examine how each individual both creates and reacts to the family system. Adler's theory can be useful in achieving this goal due to its reliance on a variety of influences, including psychoanalysis, cognitive, behavioral, and constructivist viewpoints (Lewis, 2013). Adlerian theory is comprised of multiple driving tenets that can offer insight and strategies into working with TAY who abuse substances.

Socio-Teleo-Analytic theory. Adlerian theory is considered a socio-teleo-analytic theory (Mosak & Maniacci, 1999). Adler believed individuals to be social in that they experience an innate pull towards interacting with others (Sweeney, 2009). Researchers who study factors that impact substance abuse from a psychosocial perspective examine the social context in which substance abuse develops (Cook, 2001). Social contexts encompass several variables, including family, peers, neighborhood, school, work, and societal influences (Peterson & Leffert, 1995). These variables support Adler's proposition by providing the contexts in which individuals exert their social nature. In the case of substance abuse in TAY, researchers focus on peer contexts (Borsari & Carey, 2001), as relationships with peers increase in importance during this period (Davis, 2003); however, Adler's emphasis on early development suggests that despite the increased need for meaningful peer relationships, an individual's personality and way of relating to others is established in early ages based on family interactions (Sweeney, 2009), proving the importance of continuing to examine these family factors in TAY.

In addition to the proposition that individuals are social, Adler believed that human behavior is purposive and goal directed (Sweeney, 2009). In other words, individuals behave in ways that will move them towards a particular goal. In this sense, substance abuse treatment can be understood from the underlying notion that the abuse of substances is serving some purpose for the individual, and in order to effectively treat the substance abuse, clinicians must first understand the underlying purpose the behavior may be serving. However, uncovering this purpose can be difficult because of the proposition that much of human behavior is unconscious (Sweeney, 2009). Individuals often indicate they do not understand motives behind behavior, but it is also likely that they are unwilling to admit these motives (Sweeney, 2009).

Because an individual's personality is formed at an early age, and the family is the most prominent environmental factor during the first years of life (Mosak & Maniacci, 1999; Sweeney, 2009), understanding direct relationships between family factors, such as parenting behaviors and child outcomes, such as substance abuse, may help researchers and clinicians to better understand possible underlying reasons behind abuse of substances. Examining the impact of family structure and processes is important in understanding the individual (Sweeney, 2009), thus examining the impact of parenting behaviors on the individual may provide insight into the social contexts which have supported substance use and the purpose behind the substance use. Adler's concepts of lifestyle and feelings of inferiority may prove particularly useful in understanding the direct relationships between parenting behaviors and substance abuse in TAY.

Life style. The way in which an individual views himself as fitting into the world and his approach to the life tasks are often related to one's life style (Adler, 2005). The life style, which is often equated with personality, is considered the unity between thoughts, feelings, and behaviors regarding life and one's environment (Mosak & Maniacci, 1999; Sweeney, 2009); whereas the life tasks, which include work, love, friendship, spirituality, and self refer to the main areas of life that all individuals strive to accomplish (Adler, 2005; Sweeney, 2009). An individual's perceptions of self, others, and the environment will influence how he or she chooses to engage in these life tasks (Adler, 2005). From this viewpoint, psychopathology, including substance abuse, may be related to an individual's approach to the life tasks, or more specifically, an individual's inability to cope with a life task (Dreikurs, 1990; Steffenhagen, 1974). Substance abuse may be a strategy to avoid navigating the life tasks by not accepting the responsibility one has for engaging in them, which in turn, hinders one from learning effective strategies for engaging in these tasks in the future (Adler, 2005).

Substance abuse is simply one of the behavioral or mental health concerns that can manifest as a result of ineffective coping with the life tasks (Dreikurs, 1990). The coping mechanisms an individual employs in order to avoid the life tasks may be a function of the life style (Adler, 2005), which is impacted strongly by the family, or more specifically, perceptions of parent-child interactions (Sweeney, 2009).

Life style is thought to become established and remain fairly consistent throughout life beginning around the age of five or six (Lewis, 2013). Although life styles are unique to individuals, they can manifest in specific behavioral patterns (Lewis

& Watts, 2004). In order to understand how an individual develops a particular life style, it is important to consider the holistic individual (Sweeney, 2009). Factors that influence the development of life style are both biological and psychosocial, and are strongly influenced by early experiences and development. Children develop a life style as a sort of road map to make sense of the biological, social, and environmental information they acquire (Mosak & Maniacci, 1999).

Although a variety of psychosocial factors can influence life style development, parent-child interactions are thought to play a significant role (Lewis, 2013). Adler highlighted the importance of the reciprocal relationships between parents and children, and emphasized that both parents and children act on and react to one another (Mosak & Maniacci, 1999). These interactions can influence the family atmosphere, or the emotional tone of the family (Lewis, 2013), and individuals who perceive themselves to have experienced a negative family atmosphere, such as hostile, neglectful, or rejecting atmospheres, may be more likely to abuse substances (Biggam & Power, 1998; Mak & Kinsella, 2006; Yahav, 2007). In fact, Adler believed that perceptions of the environment, rather than facts of the environment, are important in how one develops life style (Mosak & Maniacci, 1999).

Researchers suggested that perceptions may be of particular importance when examining adolescents (Bolkan et al., 2010), and due to the developmental similarities found to exist between adolescents and TAY (Pottick et al., 2014), perceptions may also play a significant role in understanding TAY experience. For example, Yahav (2007) found that adolescent perceptions of reality had a greater impact on external and internal

symptoms than did actual parenting styles. Similarly, in a study by Lemoyne and Buchanan (2011), the researchers found that college students who perceived their parents as over-involved in their lives when they were growing up reported lower levels of psychological well-being, were more likely to report being on medication for anxiety or depression, and were more likely to engage in abuse of prescription pain pills. These relationships and outcomes demonstrate the importance of perceptions of parental behavior in both adolescents and college populations. The researchers in both of these studies, however, examined direct relationships between parenting styles and outcomes without operationally defining parenting behaviors associated with each style, making it difficult to ascertain the specific behaviors associated with the reported outcomes. According to Adlerian theory, parenting behaviors that are reflective of pampering, such as enabling, autonomy granting, parental care, and behavioral control, may be important to highlight.

While not focused on the family, social norm theory provides additional evidence for the importance of perceptions when examining the TAY population. Social norm theory is often applied to the examination of alcohol use in college students (e.g., Borsari & Carey, 2003) as a way of explaining how college students often adjust the amount of alcohol they ingest based on their perceptions of peer drinking behaviors (Berkowitz, 2004). These researchers demonstrate the importance of utilizing perceptions when exploring factors associated with substance abuse in TAY, while also highlighting the need to incorporate specific parenting behaviors into these investigations, as the impact

of perceptions of parent-child interactions is crucial to understanding current functioning, from an Adlerian perspective.

The information individuals take in and the meanings they make of this information forms their core beliefs and convictions about self, others, and the world (Lewis, 2013). Often, these convictions develop from interpretations children create from the observations they make in the family environment (Mosak & Maniacci, 1999). These convictions are translated into rules and become part of the individual's private logic (Sweeney, 2009). When individuals rely solely on their private logic, they begin to believe these rules to be true for everyone, which can lead to dysfunctional life styles (Mosak & Maniacci, 1999).

Life style convictions are comprised of four components: self-concept, self-ideal, Wetbuild, and ethics. Self-concept and self-ideal refer to beliefs an individual holds about himself; however, whereas self-concept concerns ideas about how an individual currently views himself, self-ideal concerns ideas about how an individual would like to be. The Wetbuild refers to an individual's view of the world, and finally, ethics refer to an individual's sense of right and wrong (Mosak & Maniacci, 1999). Incongruity between the convictions can lead to emotional and behavioral problems, such as substance abuse (Mosak & Maniacci, 1999). For example, an individual whose self-concept is not equal to the self-ideal may experience feelings of inferiority (Mosak & Maniacci, 1999), and may cope with these feelings through the use of substances.

This propensity toward substance abuse as a coping mechanism may be related to the specific life style a TAY develops in response to early experiences. In a study of

college students, Lewis and Watts (2004) compared the predictability of life style themes and other variables that are related to alcohol consumption amongst college students (grade of first drinking experience, gender, Greek membership, and level of religious participation) and found that certain life style themes were related to alcohol consumption. Specifically, the researchers found that in relation to frequency of binge drinking and frequency of alcohol consumption, personality characteristics were more predictive than other variables. These authors highlight the potential importance of exploring personality characteristics when understanding and treating substance abuse in this population; however, they did not examine all possible life style themes as outlined by Adler, and they did not discuss results as they related to differences between the life style themes they did examine, suggesting a need to further examine specific life style themes that may be related to substance abuse in TAY.

Pampered life style. Those who abuse alcohol and drugs are thought to be characteristic of the pampered lifestyle (Adler, 2005). The environment of a pampered child is one that supports the child thinking only of himself (Dreikurs, 1990). These children often obtain things easily and expect everything from others (Keene & Wheeler, 1994). This environment can lead to a dependency on others that allows a child's needs to be met by preying on an individual's interest in the welfare of others, a concept Adler refers to as social interest (Dreikurs, 1990). Because pampered children think mostly of themselves, they may struggle to empathize with others, and thus may have difficulty forming healthy attachments (Steffenhagen, 1974). These children may resort to manipulation and exploitation as a manner of relating to others (Keene & Wheeler,

1994). As a result, they may turn to substances as a way to increase their level of comfort in social situations (Steffenhagen, 1974). To examine the relationship between substance abuse and pampered lifestyle, Keene and Wheeler (1994) utilized The Life Style Personality Inventory (LSPI) in a sample of college freshman and found a small but significant correlation between high and low risk substance abuse and the life style theme most closely related to the pampered life style. These findings mildly support the assertion that individuals who abuse substances are likely to exhibit a pampered life style; however, more research is needed to support this belief due to the small significance and the lack of direct study of the pampered life style.

The development of life style is an interactive process that occurs during childhood. In other words, objective parenting behaviors can impact an individual's development of life style, but also the perceptions the individuals has about parental behaviors, regardless of the reality of these behaviors also play a role (Mosak & Maniacci, 1999). Individuals who develop a pampered life style may do so due to parental pampering behaviors or, more specifically, child perceptions of being pampered. Because life style provides significant insight into outcome behaviors, such as substance abuse, the importance of understanding direct relationships between perceptions of parenting behaviors that impact development of life style and substance abuse is apparent.

Pampering. When a child shows characteristics of the pampered life style, it is natural to assume that it is a result of being pampered by another individual. This is often the product of pampering behaviors on behalf of the parents, which are believed to have

potentially harmful effects on children (Mosak & Maniacci, 1999), further highlighting the direct relationships between perceptions of parenting behaviors and child outcomes. Pampering, also referred to as spoiling, is reported to have the most serious impediments on child development (Dreikurs, 1948), including consequences such as substance abuse (Dreikurs, 1990; Keene & Wheeler, 1994).

Parents who pamper their children may leave them with expectations that they will be catered to, which when not met, can leave the child feeling neglected (Mosak & Maniacci, 1999). Pampering can lead to decreased self-confidence when a child who is accustomed to acquiring things easily suddenly does not get what he desires (Adler, 2005). To alleviate these feelings of decreased self-confidence, pampered children may seek continued pampering (Dreikurs, 1948), initiating a cycle of pampering and negative consequences that may encourage maladaptive behavior patterns, such as substance abuse. It can be difficult for parents to change patterns of pampering as the child grows into adolescence and young adulthood because the child may be more likely to resist changes in the treatment with which they are accustomed (Dreikurs, 1948).

Parents who pamper are thought to do so for what they believe to be the best intentions (Dreikurs, 1948). They believe that by spoiling their children they are protecting them from negative experiences and emotions (Dreikurs, 1948). In truth, pampering can be viewed as a form of disrespect towards the child (Arnold, 1987; Dreikurs, 1964). Parents, in trying to protect children through pampering, unwittingly hinder these children from performing essential responsibilities of life (Dreikurs, 1948). Pampering sends the message that an individual is incapable of performing certain tasks

on one's own (Arnold, 1987), which can be particularly detrimental to TAY who are commissioned with developing autonomy and independence. Individuals who feel discouraged may attempt to demonstrate their complete inadequacy in order to avoid making any effort of capability (Dreikurs, 1964). An example of this may be an individual who turns to abuse of substances when perceiving messages of inadequacy that result from pampering as a method of trying to avoid disproving this perception of inadequacy (Arnold, 1987). This avoidance strategy can exacerbate parental need to continue pampering behaviors, as parents may feel obligated to provide resources that will "save" the adolescent from substance use, sending the message that the parent is responsible for the adolescent's successful recovery (Arnold, 1987), and once again disrespecting or disallowing the responsibility of the adolescent in the recovery process.

There are various parenting techniques and behaviors that can be construed as pampering (Dreikurs, 1948). Four common methods of pampering, including enabling, catering to, failing to set limits, and over-supervising have been outlined in the literature (Kaplan, 1985). Each of these culminates in potential negative consequences for children (Kaplan, 1985); however, empirical connections between these specific behaviors and the concept of pampering are lacking in the literature. The theoretical link between pampering and substance abuse in adolescents and young adults (TAY) is apparent (Arnold, 1987; Dreikurs, 1948; Dreikurs, 1964; Kaplan, 1985) however, empirical research is needed to provide operational definitions for specific parenting behaviors that encompass pampering. The concepts of enabling, autonomy granting, parental care, and parental behavioral control may provide adequate definitions for pampering as they each

provide examples of ways in which a parent may demonstrate responsibility for or over a child's life and behaviors. Additionally, research is needed to identify the potential direct relationships between the behaviors that make up pampering and substance abuse.

Enabling. Kaplan (1985) identified enabling as one common method of pampering performed by parents. Parents may encumber an individual's sense of independence and self-confidence by doing for him what he could do for himself (Kaplan, 1985). This tactic mirrors what addiction professionals refers to as enabling, and is a practice that sends a message of disrespect to the individual who abuses substances (Arnold, 1987).

Enabling is a common concept found in the substance abuse literature (e.g. Rotunda, West, & O'Farrell, 2004). Enabling refers to behaviors that support another's continued use of substances by protecting the individual from consequences related to the substance use (Doweiko, 2009). Those who enable contribute to the problem in that they allow the addicted individual to avoid experiencing consequences that can potentially open their eyes to the negative impact of their substance use (Doweiko, 2009). Enabling is often discussed as it relates to behaviors of intimate partners towards substance abusing individuals (Rotunda, et al., 2004); however, in the case of TAY who continue to rely on parents as resources, enabling may be an important concept to consider as it relates to parenting behaviors.

Parental enabling is distinctly defined as behaviors that rescue a child from age-appropriate tasks and responsibilities and the resulting consequences from not upholding those tasks and responsibilities (Lynch et al., 2002). Parents may view the protection

provided by enabling as a way of helping the child, but a distinction between helping and enabling can be made. Helping refers to doing for individuals what they cannot do for themselves; whereas enabling refers to doing something for individuals that they can and should do for themselves (Arnold, 1987; Kaplan, 1985). By engaging in behaviors that prevent a child from experiencing consequences to inappropriate behavior (such as substance abuse), parents ultimately are reinforcing these behaviors (Lynch, et al., 2002). In this way, enabling can be considered a type of pampering in that parents are doing for their children what children should be doing for themselves, which reinforces dependent behavior and decreases the experience and understanding of natural consequences (Lynch, et al., 2002). Although a paucity of research exists examining parental enabling as it relates to subsequent substance abuse into transitional ages, parents of academically at-risk youth displayed more enabling behaviors than did parents of honors students, suggesting a potential relationship between parental enabling and negative child outcomes (Lynch, et al., 2002).

Enabling can be disabling in that it sends the message that the individual lacks the resourcefulness and the ability to have power and control over one's life by encouraging beliefs of external control versus internal control (Lynch, et al., 2002). These external control beliefs can also convey a lack of worth in the individual (Arnold, 1987) by suggesting a lack of internal ability and responsibility for one's own life. These messages are exceptionally dangerous for TAY who are in a crucial period of identity formation (Davis, 2003) and may suffer from finding their own abilities and worth when they do not believe they possess control over their own outcomes; however, there is a

lack of research examining the potential impact of parental enabling on this population. As such, enabling can impact substance abuse in TAY both as a function of reinforcing negative behaviors and as a coping mechanism for low feelings of self-worth that may be internalized as a result of the messages enabling behaviors send to a child.

Autonomy granting. Researchers agree that a crucial component of TAY is the development of autonomy and independence (e.g., Feldman, 2005; Fingerman et al., 2012; Pottick et al., 2014), as an essential task that exists during the transition from adolescence to adulthood includes navigating new roles and assuming an adult identity. The development of autonomy includes affective, behavioral, and cognitive domains, in that as children begin to differentiate from family they work towards develop a sense of individuation, initiate independent decision-making, and begin to establish a belief in personal control over their own lives (Sessa & Steinberg, 1991). As parents continue to act as resources during this critical period, parenting behaviors that hinder the granting of autonomy may play a role in the development of dependent behaviors, which are characteristic of the pampered lifestyle (Dreikurs, 1990).

Autonomy granting refers to parenting behaviors that promote independence and decision-making in the child (Kunz & Grych, 2013). Parents who promote autonomy in their children assist in fostering their development of a sense of control over their own life, which is related to positive adjustment and psychosocial outcomes (Manzi, Regalia, Pelucchi, & Fincham, 2012). In this sense, low levels of autonomy granting may be related to pampering in that parents who over-supervise allow little room for children to make their own decisions and act independently (Kaplan, 1985). Researchers report a

negative relationship between failure to promote autonomy and self-esteem (Bush, Peterson, Cobas, & Supple, 2002). Researchers found autonomy granting to be a significant predictor of adolescent self-esteem in a sample of adolescents from the United States, but not in a sample of adolescents from Germany (Barber, Chadwick, & Oerter, 1992). Additionally, in their study examining parenting behaviors that predict self-esteem in a sample of Chinese adolescents, Bush et al. (2002) found both perceived maternal and paternal autonomy granting behaviors were positive predictors of adolescent self-esteem. Thus, autonomy granting behaviors may differ in importance across cultures, but appears to be a potential predictor of adolescent self-esteem despite potential differences between individualistic and collectivistic cultures (Bush et al., 2002). Although researchers have established associations between autonomy granting and self-esteem, relationships between low levels of autonomy granting and other internalizing behaviors have not been examined in research (Kunz & Grych, 2013).

In theory, children who are not afforded the opportunity to make decisions may perceive this as a function of parents not trusting their judgment, which could lead to feelings of inferiority, including low self-esteem, self-efficacy, and/or shame. As a result, these children may turn to substance use as a mechanism for coping with these difficult feelings about the self (Adler, 2005). However, associations between failure to promote autonomy and externalizing behaviors have not been consistently found in research (Barber, 1996; Kunz & Grych, 2013). For example, in a study by Silk, Morris, Kanaya, and Steinberg (2003), although the researchers found autonomy granting to be associated with adolescent self-concept, it was not predictive of internalizing symptoms

or drug use. On the other hand, Kunz and Gych (2013) attempted to explore the relationship between autonomy granting and youth internalizing and externalizing problems using reports from mothers, fathers, and youth, and consistently found a negative correlation between autonomy granting and externalizing behaviors when examining the three reports. In addition, the researchers found autonomy granting predicted parent reports of externalizing problems and psychological control predicted child reports of externalizing and internalizing problems only when autonomy granting was also low, suggesting that autonomy granting may be particularly salient from adolescents' perceptions.

Parental care. Another method of pampering outlined by Kaplan (1985) includes catering to a child. According to Biggam and Power (1998), parental care relates to the level of availability and responsiveness a parent demonstrates towards a child, which is consistent with Kaplan's (1985) process of pampering in that parents who are overly available and responsive to a child may cater to the needs of that child. Parental care is thought to be one of the core elements of successful parenting practices (Bowlby, 1977); however, consistent with Adlerian theory, researchers report the child's subjective perceptions of these behaviors are more influential on outcomes, even into adulthood (Biggam & Power, 1998; Parker et al., 1979; Yahav, 2006). In fact, while Fingerman et al. (2012) suggest parents provide more support to TAY than they once did, it is also true that the child's perceptions of this support as imposed can be detrimental as it has the potential to weaken efficacy and competence in the child. Parents reported higher levels of distress when they believed their children were not meeting appropriate developmental

milestones, thus the provision of intense support may truly be a function of low parenting efficacy, rather than beliefs that children are incapable (Fingerman et al., 2012), however, this may not be the message perceived by the child. This potential discrepancy further highlights the influence of perceptions on TAY outcomes.

The construct of parental care is defined as existing on a continuum from rejection, characterized by emotional coldness, indifference, neglect, hostility, and aggressive behaviors, to warmth, characterized by affection, emotional warmth, empathy, and closeness (Biggam & Power, 1998; Parker, et al., 1979; Yahav, 2006). Parental care has been linked to positive outcomes, such as improved self-esteem in many research studies including diverse populations (e.g., Barber, Stolz, & Olsen, 2005; Bean, Bush, McKenry, & Wilson, 2003). Parents who are warm are attentive and responsive to the child (Biggam & Power, 1998); however, excessive levels of attentiveness and responsiveness can mimic catering to the child by indulging the child by giving too much too often (Kaplan, 1985) rather than promoting responsibility for attending to one's own needs. Indulging the child can be detrimental as individuals enter the transitional ages and are unprepared to demonstrate independence and responsibility. This unpreparedness may increase internalizing symptoms, such as feelings of inadequacy, and externalizing behaviors, such as substance abuse, suggesting an apparent need to better understand the relationship between high levels of parental care, feelings about the self, and substance abuse, particularly in TAY who are tasked with struggling to develop autonomy and independence. Still, many researchers who examine the impact of parental care on subsequent outcomes focus more heavily on the impact of low levels of parental care, or

parental rejection, rather than high levels of parental care (Biggam & Power, Mak & Kinsella, 1996; Yahav, 2006).

Despite the lack of direct examination of negative consequences related to high levels of parental care, some researchers have examined the negative impact of parenting styles that are associated with indulgence, a characteristic of high levels of parental care. Many of these researchers have utilized adolescent populations (e.g. Adalbjarnadottir & Hafsteinsson, 2001; Biggam & Power, 1998; Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Yahav, 2006); however, less is known about the impact of perceptions of these parenting behaviors throughout childhood on TAY. In one such study, researchers found that adolescents who perceived their parents as indulgent were significantly more likely to be disengaged from school and demonstrate deviant behaviors, including substance abuse, than individuals who perceived their parents as neglectful, a characteristic of low levels of parental care (Lamborn, et al., 1991). However, results of this study may be interpreted with caution because the authors did not specify how substance abuse was measured, and they did not provide reliability and validity for the index they created for measuring these parenting characteristics (Lamborn, et al., 1991). Moreover, in another study, individuals who perceived parents as indulgent appeared to be more protected against substance experimentation in early adolescence, but increased their experimentation with substances in later adolescence when compared to perceptions of parental neglectful behaviors (Adalbjarnardottir & Hafsteinsson, 2001). This seems to suggest parental catering behaviors in later adolescence may prompt individuals to explore their independence through more risky behaviors, such as substance abuse.

These results are particularly pertinent to TAY as this population includes individuals in late adolescence; however, more empirical evidence is needed to examine the relationship between specific parenting behaviors, rather than parenting styles.

These researchers demonstrated that high levels of care can impact negative child outcomes in later adolescence; however, other researchers have found parental care to have a positive impact (Barber et al., 2005; Bean et al., 2003). This discrepancy may be due, at least in part, by child perceptions of the support as desired or intrusive. These results, coupled with the apparent developmental associations between adolescents and TAY, provide an argument for examining the relationship between high levels of parental care and subsequent substance abuse in the TAY population.

Parental behavioral control. Two final methods of pampering, failing to set limits and enforce consequences, and over-supervising have been identified (Kaplan, 1985). These methods may be linked to what current researchers refer to as parental behavioral control, which describes the level of behavioral intervention and regulation a parent exerts over a child's behavior (Barber, et al., 1994; Biggam & Power, 1998). Similar to parental care, parental control, or protection, is identified as a core aspect of successful parenting (Bowlby, 1977) and includes a parent's ability to know when to intervene in a child's life, using methods of monitoring, supervision, communication, and enforcement of rules (Avenevoli, Conway, & Merikangas, 2005), without doing too much or too little (Biggam & Power, 1998). Although some level of behavioral control has been linked to positive outcomes, such as higher self-esteem, in adolescents (Barber et al., 1992; Bean et al., 2003), parents who intervene too much are thought to overprotect

their children. Overprotection is explained by high levels of contact with a child and excessive concerns for a child (Yahav, 2006), both of which mirror the idea of over-supervising a child. Additionally, overprotection includes hindering the development of independence of a child, and permissiveness towards a child (Yahav, 2006), two concepts that relate closely to failing to set limits and enforce consequences.

Consequences to overprotection are readily present in the literature. Parker (1983) identifies both short-term and long-term consequences including anxiety, passivity, dependency, feelings of inferiority, lack of development of identity, and relational impairments. Lack of discipline and permissive attitudes around monitoring a child's behavior has been linked to early initiation of substance use (Avenevoli, et al., 2005), which is predictive of continued use and problematic use into late adolescence and adulthood (Pottick, et al., 2014; Wilens & Rosenbaum, 2013). Additionally, individuals who perceived overprotective behaviors, such as inconsistencies in behavioral expectations, rewards for positive behavior, and punishments for negative behaviors throughout childhood were more likely to abuse substances in adolescence and adulthood (Hawkins, Catalano, & Miller, 1992; Mak & Kinsella, 2007), highlighting the impact of early experiences of parenting behaviors into later life. Many college students have less direct contact with parents than they did in the past; however, in a study of University students, participants who reported high levels of parental care and low levels of overprotection also reported better college adjustment (Klein & Pierce, 2009), further demonstrating the importance of examining parenting behaviors in a college population of TAY.

Approaches to parenting representative of behavioral control may increase an individual's feelings of inferiority as parents struggle to allow children to feel comfortable finding independence and responsibility in their daily life tasks (Kaplan, 1985), tasks that have been identified as essential in TAY (Davis, 2003; Fingerman, et al., 2012; Wilens & Rosenbaum, 2013). For this reason, overprotection may play an important role in the development of substance abuse in adolescence because it sends a message of inadequacy to the child that can decrease feelings of self-worth (Kakihara & Tilton-Weaver, 2009), and lead to substance abuse as a coping mechanism. Yahav (2006) supported this assertion by finding that individuals demonstrating both internalizing symptoms (e.g. anxiety, low-self esteem, and depression) and externalizing symptoms (e.g. delinquency, aggression, and antisocial conduct) were more likely to report perceptions of overprotection than were individuals in a control group. Similarly, in a sample of incarcerated youth, overprotection was predictive of psychological distress (Biggam & Power, 1998), suggesting the internalized messages that result from overprotective behaviors may be more impactful on psychological well-being, and externalizing behaviors, such as substance abuse, may be a coping response for these lower feelings of well-being. These researchers demonstrate the possibility that although a positive relationship between parental behavioral control and substance abuse exists, it may be partially mediated by feelings of inadequacy. These findings provide evidence of the connection between parental behavioral control and pampering as researchers have theorized the detrimental impact that pampering has on children as it sends a similar

message of disrespect regarding the abilities of the child (Arnold, 1987; Dreikurs, 1948; Dreikurs, 1964; Kaplan, 1985).

The constructs of enabling, parental care, and parental behavioral control, though distinct, share characteristics that provide evidence of their potential connection with the overarching construct of pampering. Enabling, parental care, and parental behavioral control have all been positively associated with behavioral outcomes, such as substance abuse (e.g. Lamborn, et al., 1991; Mak & Kinsella, 2007; Rotunda, et al., 2004). In addition, each of these constructs are similar in that they send messages to the child that may be internalized as low feelings of competence, adequacy, and worth (e.g. Biggam & Power, 1998; Kakihara & Tilton-Weaver, 2009; Rotunda, et al., 2004; Yahav, 2006), assertions that are consistent with theoretical applications of pampering (Arnold, 1987; Kaplan, 1985). Thus, research is needed to empirically determine the adequacy in defining pampering utilizing the constructs of enabling, parental care, and parental behavioral control, as these constructs provide concrete behaviors that are missing in the theoretical definition of pampering.

Parental psychological control. Researchers who emphasize the importance of parental behavioral control in the understanding of child outcomes into adolescence and early adulthood have also highlighted the influence of parental psychological control (Avenevoli, et al., 2005). Unlike behavioral control, which includes behaviors on the part of the parent that attempt to manage a child's behavior, psychological control refers to attempts to control the psychological and emotional development of a child (Barber, 1996). Psychological control is characterized by intrusiveness, excessive criticism, love

withdrawal, guilt induction, shaming and overprotection (Barber, 1996). The inclusion of overprotection demonstrates the relationship between behavioral control and psychological control and suggests both constructs may be important to examine when exploring child outcomes. Moreover, psychological control includes manipulating the love relationship between parent and child in attempts to control the child's behavior (Barber, 1996), and some authors suggest that intensely high levels of behavioral control can manifest as psychologically intrusive (Kakihara & Tilton-Weaver, 2009), further demonstrating the relationship between parental psychological control and parental behavioral control.

Although not directly associated with pampering, recent investigations into the construct of psychological control have demonstrated some connections between the constructs. Similar to pampering, researchers have conceptualized psychological control as a potential method of disrespect by undermining the integrity and individuality of the child (Barber, Xia, Olsen, McNeely, & Bose, 2012). Using a sample of adolescents from 5 cultures, Barber and colleagues (2012) found that adolescent perceptions of parenting behaviors that disrespected their individuality were distinct from previously conceptualized psychological control.

Just as the disrespect pampering exerts towards a child can impact the way in which the child views himself, psychological control can have a similar impact. According to Barber (1996), psychological control is more predictive of internalizing behaviors, such as anxiety and depression, whereas behavioral control is more predictive of externalizing behaviors, such as substance abuse. Specifically, in regards to

internalizing behaviors, higher levels of psychological control were associated with lower self-esteem in a sample of African American and European American adolescents (Bean et al., 2003). Additionally, children who identified as experiencing loneliness, depression, sadness, or confusion were found to experience higher levels of psychological control; whereas, children who indicated using inappropriate language, engaging in substance use, and skipping classes were found to experience higher levels of parental behavioral control (Barber, et al., 1994). However, these researchers used both parent and child report, which may have yielded different results than if they assessed child perceptions. More recently, researchers have found that in a sample of adolescents from 5 different cultures, psychological control that is characteristic of disrespect predicted depression and antisocial behavior (Barber et al., 2012). Similarly, psychological control predicted feelings of shame, low self-esteem, failure and unworthiness in a sample of Israeli youth (Assor & Tal, 2012), demonstrating the potential impact of psychological control on internalizing and externalizing behaviors across cultures.

Although researchers have found that individuals with depression were more likely to perceive their parents to have used guilt induction, negative evaluations, and intrusiveness (Barber, 1996; Burbach & Bourdin, 1986), few researchers have examined the direct relationship between parental psychological control and substance abuse (Avenevoli, et al., 2005). However, results of one study were such that maternal use of guilt was positively associated with marijuana use in adolescents (Brook, Brook, Gordon, Whiteman, & Cohen, 1990). On the other hand, researchers have posited that children

who perceive behaviors indicative of parental behavioral control may experience feelings of inadequacy regarding their abilities, leading to the use of substances as a coping mechanism for these feelings (Biggam & Power, 1998; Yahav, 2006), though this hypothesis has yet to be empirically validated. Consequently, if externalizing behaviors that are apparent as a result of parental behavioral control are in fact mediated by internalized feelings of low self-esteem and incompetence, it may also be possible that parental psychological control is positively associated with substance abuse when also mediated by similar feelings of inadequacy or inferiority. For example, Barber (1996) found that parental psychological control was positively related to delinquency in adolescents; however, he was unable to identify potential explanations for this relationship. There are possible explanations, including that parental psychological control is a result of adolescent participation in delinquent behavior, or that parental psychological control leads to engagement in delinquent behavior as a coping response to low feelings of self-worth resulting from perceptions of parental psychological control. Further exploration of the potential mediating relationship of self-esteem on psychological control and adolescent outcomes has been examined (Hunter, Barber, & Stolz, 2014). These researchers found that in a sample of adolescents over time, self-esteem mediated the relationship between maternal and paternal psychological control and both adolescent depression and antisocial behavior, but did not mediate the relationship between behavioral control and the same outcomes (Hunter et al., 2014).

In line with Adlerian theory, researchers who examine parental psychological control emphasize the importance of perceptions in measuring the construct, stating that

outcomes are likely to be more strongly related to subjective experiences of psychological control (Barber, 1996; Barber et al., 2012). Although psychological control and behavioral control are distinct constructs, they are related in such a way that they both have the potential to impact feelings of competence, adequacy, self-esteem, self-efficacy, and shame into the transitional years of TAY (e.g. Barber, 1996; Biggam & Power, 1998; Yahav, 2006), which in turn, may impact substance abuse behaviors. The importance of these internalized feelings highlight the necessity of exploring feelings of inferiority, another Adlerian construct, when examining substance abuse in TAY.

Feelings of inferiority. While pampering appears to be one theoretical link to substance abuse, the connection between feelings of inferiority and pampering provide an argument for the importance of feelings of inferiority when understanding the link between parenting behaviors and substance abuse in TAY. In individual psychology, issues of maladjustment are thought to be related to an individual attempting to overcome deep feelings of inferiority, which are often the result of the childhood experience of being pampered (Keene & Wheeler, 1994). Feelings of inferiority may also be particularly pertinent to the understanding of TAY as these feelings are thought to be a result of a conflict between the childhood desire to become more independent and autonomous and a continued desire to remain dependent (Alexander, 1938), a conflict that is proven to be especially prevalent amongst the TAY population (Davis, 2003; Fingerman, et al., 2012).

Adler believed that individuals strive for superiority, or strive to move from a less positive situation to a more positive situation (Mosak & Maniacci, 1999). Individuals

experience feelings of inferiority when their beliefs about themselves lead them to question their abilities and effectiveness (Dreikurs, 1990). Adler argued that an individual's perceptions of the environment may lead to a questioning of competence, significance, and belongingness, which can manifest in adjustment issues, including psychopathology such as substance abuse (Dreikurs, 1990; Gupta, 1996). In a study exploring the relationships between feelings of inferiority and adjustment in female adolescents, Gupta (1996) found significant differences in reported emotional, social, educational, and general adjustment between female adolescents who reported few feelings of inferiority and those who reported severe feelings of inferiority; specifically with females reporting more feelings of inferiority also reporting less positive adjustment on all domains.

Feelings of distress related to doubts about oneself may be experienced in the form of an inferiority complex (Dreikus, 1990), and use of substances could be viewed as a coping mechanism for these feelings of inferiority (Adler, 2005). Most individuals experience feelings of inferiority at some point in their lives and these feelings alone do not necessarily denote an inferiority complex (Dreikurs, 1990). Feelings of inferiority are subjective evaluations individuals have about themselves (Mosak & Maniacci, 1999); whereas, inferiority complexes are behavioral representations of these subjective evaluations (Mosak & Maniacci, 1999). Individuals with inferiority complexes, who subsequently develop emotional and behavioral problems, carry their feelings of inferiority with them constantly (Adler, 1926).

Feelings of inferiority are described as intense and overwhelming feelings of low self-esteem, self-doubt, and not feeling accepted by society (Dreikurs, 1990); however, no empirical research exists to substantiate these theoretical conceptualizations (Gupta, 1996). Researchers posit that this lack of empirical evidence may be related to difficulty in defining the concept due to the multiple constructs that likely comprise feelings of inferiority (Strano & Dixon, 1990). Self-esteem is one such construct that has been identified in the literature (Dreikurs, 1990; Strano & Dixon, 1990), with one researcher defining self-esteem anomalies as feelings of inferiority (Parker, 1983). However, self-esteem may only partially describe the overarching concept of feelings of inferiority. Self-doubt may be a result of a lack of confidence and efficacy in one's abilities (Bandura, 1977), providing an argument for exploring self-efficacy (both in the general sense, and as it relates to abstinence) as an important construct describing feelings of inferiority. Additionally, individuals who struggle to feel accepted by others may do so as a result of feelings of shame related to difficulty in accepting oneself as worthy (Tangey & Dearing, 2002). Therefore, self-esteem, GSE, ASE, and shame may prove useful in operationally defining the construct of feelings of inferiority.

Similar to family experiences, the meaning an individual attaches to these feelings of inferiority may play a more important role than the feelings themselves (Adler, 1958), thus, understanding potential factors that influence feelings of inferiority may provide insight into these meanings, which will ultimately influence the way in which we treat or address these feelings when working with TAY who struggle with substances. Empirical research is needed to first operationally define feelings that encompass inferiority, such

as self-esteem, GSE, ASE, and shame, and second to identify potential relationships between parenting factors, these feelings of inferiority, and subsequent substance abuse.

Self-esteem. In Adlerian theory, individuals strive for superiority, the goal of which is to enhance feelings of self-esteem (Strano & Dixon, 1990). In theory, individuals who are unsuccessful in striving for superiority may experience feelings of inferiority as a result of questioning their adequacy and competence, highlighting the theoretical link between feelings of inferiority and self-esteem. Similarly, as noted, an incongruence between who one believes himself to be (self-concept) and who one believes he should be (self-ideal) can lead to feelings of low self-esteem that manifest in thoughts such as "I am not who I should be" (Alexander, 1938; Mosak & Maniacci, 1999). According to Alexander (1938), these feelings of inadequacy can lead to substance use as a coping mechanism to avoid the negative feelings, or for creating synthetic feelings of adequacy and worth. The use of substances as a coping mechanism can further increase feelings of inferiority by increasing subsequent feelings of shame at oneself for utilizing substances to cope (Alexander, 1938).

Self-esteem is defined as a positive or negative belief about the self as worthy or unworthy (Baumeister, 1998; Rosenberg, 1965). Researchers have outlined the possibility of defining self-esteem as a global construct evaluating beliefs and feelings about the overall self across all situations, or as a multidimensional construct that fluctuates across situations (Heatherton & Wyland, 2003). In this sense, global self-esteem may reflect Adler's concept of inferiority complex, whereas area specific self-esteem may reflect feelings of inferiority. Despite the differing views on the

dimensionality of self-esteem, most researchers agree self-esteem is a relatively stable construct (Heatherton & Wyland, 2003).

In TAY, the concept of self-esteem is particularly salient as this population is deeply concerned with self-image due to societal pressure to meet the developmental tasks of increased decision making and autonomy finding, the experience of multiple biological and psychosocial changes, and the experience of identity confusion (Davis, 2003; Pottick, et al., 2014; Rosenberg, 1965). The need to make decisions regarding one's future can lead to questions regarding personal beliefs about one's abilities, skills, social relationships, and future outcomes, which may ultimately impact an individual's self-esteem (Heatherton & Wyland, 2003).

Many times, beliefs and attitudes about the self exist based on perceived messages, responses, and attitudes from others (Heatherton & Wyland, 2003; Rosenberg, 1965). In a sample of adolescents, researchers found a relationship between lower self-esteem on measures of home, school, peers, and drug use behavior. This relationship was less strong in relation to self-esteem and peers, but self-esteem was found to play a significant role in drug use when all three areas were examined together (Donnelly, Young, Pearson, Penhollow, & Hernandez, 2008), suggesting that it may be important to consider feelings of inferiority within different social contexts when attempting to understand substance abuse in TAY due to the developmental similarities present between TAY and adolescents. One of the prominent social contexts in which both adolescents and TAY exist is the family. In a study examining the impact of perceptions of parental support and monitoring on adolescent self-esteem and substance use and

delinquency, perceptions of higher parental support and more parental monitoring were associated with higher self-esteem and lower alcohol use, marijuana use, and misconduct; however, this relationship between parental support and outcomes was weaker in significance for cocaine use and delinquency (Parker & Benson, 2004). Additionally, the relationship between parenting factors and self-esteem was stronger in significance than the relationship between parenting factors and behavioral problems (Parker & Benson, 2004), emphasizing the importance of examining the potential relationship between self-esteem as it relates to family factors, such as parenting behaviors.

The notion that individuals internalize feelings about the self that impact self-esteem based on the way in which others respond to the individual is consistent with findings related to parenting behaviors that reflect pampering and child outcomes. Behaviors consistent with enabling, intense levels of parental care, high levels of parental behavioral control, and parental psychological control have been found to be positively related to internalizing problems in transitional ages, likely because each of these behaviors sends a message that the individual is unable to be responsible for the self, and thus need higher levels of parental involvement in order to be successful (Arnold, 1987; Barber, 1996; Biggam & Power, 1998; Yahav, 2003). These messages may negatively impact self-esteem, and in fact, parental psychological control and parental overprotection have been found to be negatively associated with self-esteem (Barber, 1996; Parker, 1983).

General self-efficacy (GSE). According to Adlerian theory, feelings of inferiority may result when an individual questions his abilities (Dreikurs, 1990). More

specifically, as all individuals seek to successfully complete the life tasks, uncertainties about one's abilities may surround the tasks of work, love, friendship, spirituality, and self. Inability to accomplish life tasks can lead to feelings of inferiority, just as feelings of inferiority can impede an individual's ability to accomplish life tasks (Adler, 2005; Dreikurs, 1990).

Self-efficacy is a cognitive process that describes an individual's confidence in performing a specific ability (Bandura, 1977). On the other hand, GSE is defined as an individual's perception of their ability to perform across a variety of different situations (Judge et al., 1998). In other words, although self-efficacy is a situation-specific belief in one's competence, GSE is a trait-like belief in one's overall competence (Scherbaum et al., 2006). Although self-efficacy and GSE are distinct constructs, researchers report a positive correlation between GSE and task-specific self-efficacy (Sherer et al., 1982), as well as a distinct relationship with self-esteem (Judge et al., 1998), demonstrating the potential relationship between GSE, task-specific self-efficacy, and self-esttem with inferiority feelings.

Individuals who experience feelings of inferiority, such as low self-esteem, may grapple with believing in their own GSE. As TAY face new experiences, responsibilities, and challenges (Davis, 2003; Pottick et al., 2014), their belief in their abilities to navigate these challenges is crucial. For this reason, the development of GSE is a particularly essential in TAY; yet, little research has been conducted examining GSE in TAY (Burleson & Kaminer, 2005).

The development of GSE is impacted by personal experience, vicarious experiences, verbal persuasion, and one's psychological state (Scherbaum et al., 2006), thus, similar to self-esteem, an individual's confidence in one's abilities can often be a function of perceptions of others' confidence in the individual's abilities (Rosenberg, 1965). Parenting behaviors that are characteristic of pampering often send messages that the child is incompetent or incapable of managing his own responsibilities (Arnold, 1987; Biggam & Power, 1998; Kaplan, 1985; Yahav, 2006), thus, pampering may have a direct relationship with feelings of inferiority by impacting self-efficacy. Additionally, if substance abuse is a coping strategy for feelings of inferiority, pampering may be indirectly related to substance abuse when mediated by feelings of inferiority.

Although GSE is thought to be impacted by negative feedback or evaluations from others, some researchers report GSE may moderate the relationship between external influences and task-specific self-efficacy (Scherbaum et al., 2006). In other words, individuals who possess higher levels of GSE may be less impacted by negative feedback from others as it relates to task-specific GSE. Thus, in the case of substance abuse, GSE may be correlated with abstinence self-efficacy (ASE), which may also be impacted by parenting behaviors that send messages that an individual is incapable of being responsible for their own abstinence.

Abstinence self-efficacy (ASE). Individuals may turn to substances as a method of coping with feelings of inferiority or inability to complete life tasks (Adler, 2005). In this sense, substance abuse is a strategy for individuals to isolate themselves from others to avoid comparing themselves and exacerbating feelings of inferiority. Substance abuse

can also be a strategy to avoid experiencing uncomfortable feelings related to inferiority and to ignore perceived inadequacies and abilities (Adler, 2005; Steffenhagen, 1974).

Parents who pamper a TAY who abuses substances may send the message that the parent is responsible for the individual's recovery (Arnold, 1987), which may decrease the individual's confidence in his own ability to abstain from substances. Self-efficacy is a construct utilized often in the substance abuse literature to describe confidence in one's ability to remain abstinent from substances in high-risk situations. As TAY begin to experience more independence and autonomy, as well as enter the legal drinking age, they are likely to experience high-risk situations, therefore, self-efficacy around one's ability to remain abstinent is vital in this population.

Strengthening this argument, low self-efficacy is positively related to relapse (Marlatt, 1985b). When an individual is successful at maintaining abstinence in a high-risk situation, self-efficacy will increase and the individual will have increased confidence to remain abstinent in future situations (Marlatt, 1985b). Furthermore, abstinence self-efficacy is found to be predictive of treatment efficacy (DiClemente, Carbonari, Montgomery, & Hughes, 1994), emphasizing the importance of considering self-efficacy when providing treatment for substance abuse. For example, in a study of adolescent substances abusers, Burleson and Kaminer (2005) found that higher self-efficacy was predictive of lower drug use during treatment. Similarly, in a study of individuals receiving treatment for use of crack cocaine, self-efficacy was found to increase during treatment and those reporting abstinence one month after treatment reported higher levels of self-efficacy (Coon, Pena, & Illich, 1998), highlighting the

positive impact of treatment on self-efficacy and the reciprocal relationship between self-efficacy and abstinence. The positive implications of treatment on self-efficacy underscore the necessity of addressing potential factors that influence self-efficacy, such as parenting behaviors, during treatment.

When parents pamper their children, alleviating their need to navigate high-risk situations, children are not given the opportunity to foster their own self-efficacy. Moreover, individuals often avoid situations in which they experience low self-efficacy (Marlatt, 1985a), thus pampering a child may create a feedback cycle in which the development of self-efficacy is inhibited, followed by avoidance of situations, further preventing self-efficacy and the need for increased pampering. Substance abuse may be a method of further avoiding responsibilities of life in which an individual does not feel efficacious (Adler, 2005), thus encouraging the development of feelings of inferiority.

Although researchers have posited the relationship between parenting behaviors consistent with pampering and low self-efficacy (Arnold, 1987; Biggam & Power, 1998; Kaplan, 1985; Yahav, 2006), no research exists examining these relationships empirically. Additionally, self-efficacy has not been examined as a potential mediating factor between parental pampering and subsequent substance abuse. Finally, despite the theoretical connections between self-efficacy and feelings of inferiority, no research has been conducted to empirically validate self-efficacy as an adequate construct to define feelings of inferiority.

Shame. Negative evaluations about an individual's identity can also manifest in feelings of shame (del Rosario & White, 2006). Shame is often linked in the literature to

feelings of rejection (Gausel, Leach, Vignoles, & Brown, 2012). This connection demonstrates the theoretical link between feelings of inferiority and shame, as feelings of inferiority include not feeling accepted by others (Dreikurs, 1990). Feelings of rejection are found to be associated with lower self-esteem (Gausel, et al. 2012). Like self-esteem, shame is often experienced as a result of incongruence between the self-concept and the self-ideal (Tangey & Dearing, 2002), which has been shown to decrease self-efficacy by increasing feelings of incompetence (del Rosario & White, 2006). However, unlike self-esteem, which is considered the actual self-evaluation, shame is the emotion associated with self-evaluations (Tangey & Dearing, 2002). A consistent relationship between shame and self-esteem has been found in research; yet, the magnitude of the relationship is not strong (r = .42; Tangey & Dearing, 2002), demonstrating that relationships exist between self-esteem and shame; however, despite these similarities, shame is a distinct construct.

Shame is described as an enduring, chronic sense of inferiority, inadequacy, or deficiency that has become internalized as part of one's identity (Tangey & Dearing, 2002). Therefore, in relation to feelings of inferiority, feelings of shame are chronic and reflect beliefs and emotions about the core aspects of the self (Tangey & Dearing, 2002); whereas self-esteem may fluctuate slightly based on current situations it is believed to remain relatively stable (Heatherton & Wyland, 2003), and self-efficacy relates to feelings of confidence about specific abilities (Bandura, 1977). Similar to the importance of self-efficacy and esteem, feelings of shame may be expressly relevant to the TAY as they are at a time of peak identity formation (Davis, 2003). Ultimately with shame being

detrimental to the development of identity. Fundamentally, shame occurs due to fear of exposing the self as flawed. This fear does not need to occur in the presence of others, but can be a fear within the self (Wiechelt, 2007), often accompanied by feelings of worthlessness and powerlessness (McGaffin, Lyons, & Deane, 2013).

Historically, researchers have struggled with the examination of shame as the construct lacks a universal definition, and is often confounded with the construct of guilt (Rizvi, 2010; Tangey & Dearing, 2002). Researchers asserted that despite this lack of definition, shame appears to be rooted in the construct of inferiority (del Rosario & White, 2006; Dreikurs, 1990; Gausel, et al., 2012; Tangey & Dearing, 2002; Tomkins, 1991), and is distinct from guilt. Specifically, guilt equates negative feeling about a behavior, whereas shame equates negative feelings about the self (Tangey & Dearing, 2002; Wiechelt, 2007). To examine potential differences between guilt and shame, a researcher asked a sample of college students to describe experiences of shame and guilt. The researcher found significant differences between the two experiences in that students consistently rated shame experiences as more painful and more difficult to describe than guilt experiences, and shame experiences were more likely to be associated with feelings of inferiority (Tangey, 1993).

The concepts of shame and guilt are prevalent in the substance abuse literature, and researchers argue that guilt may in fact be a positive emotion in that feeling bad about an event or behavior increases an individual's level of empathy for others and increases motivation to change (Tangey & Dearing, 2002). On the other hand, individuals who blame themselves for negative events have more difficulty fostering

empathy and may be less likely to be motivated to change based on an internalized belief in an inability to do so (Tangey & Dearing, 2002). In fact, individuals identified as having substance abuse problems are found to have higher levels of shame than individuals with other mental health problems and the general population (O'Connor, Berry, Inaba, Weiss, and Morrison, 1994). Individuals who experience these strong negative evaluations about the self may use substances as an escape from the pain of their feelings (Adler, 2005; Cook, 1988), but in turn, may experience increased feelings of shame with themselves for doing so (Cook, 1987; Wiechelt, 2007). This idea underscores the reciprocal relationship between shame and substance abuse. The relationship between shame and substance abuse is evidenced conceptually in the literature; however, there is scarce empirical evidence evaluating these relationships (McGaffin,et al., 2013)

Shame develops as a result of exposure to recurrent, continuous, or intense shaming experiences (Wiechelt, 2007). Shame has been found to be relatively stable from childhood into transitional ages (Tangey & Dearing, 2002), thus, the endurance of shaming experiences in childhood and adolescence that increase feelings of shame may lead to substance abuse into transitional years. In addition, individuals with higher levels of shame are found to be more prone to substance related problems (Cook, 1988). In a longitudinal study, Tangey and Dearing (2002) found a positive relationship between fifth graders reporting more shame-proneness and subsequent substance abuse at age 18. These findings are evidence that experiences in childhood have the potential to impact feelings of shame, and those feelings may be predictive of substance use during the

transitional years, further providing insight into the notion that shame is an important mediator in understanding mental health problems, such as substance abuse (Rizvi, 2010).

Factors related to family of origin are strong sources of shame, and one such factor includes parenting style and parenting practices (Cook, 1988; Tangey & Dearing, 2002; Wiechelt, 2007). Specifically, parental psychological control is described as behaviors that promote shaming in the child (Barber, 1996). Similarly, parenting behaviors that lead to extreme levels of parental involvement, including enmeshment, are characteristic of shame-based family systems (Tangey & Dearing, 2002). Adults who recalled behaviors consistent with parental overprotection were more prone to experience shame in adulthood; however, low levels of parental care, rather than intense parental care was also associated with feelings of shame (Lutwak & Ferrari, 1997). Feelings of shame may result when there are disparities between the child's perceptions of who the parent wants him/her to be and who the child believes himself/herself to be (Tangey & Dearing, 2002). Thus, when individuals do not perceive themselves as capable of managing responsibilities, due to parental pampering behaviors, feelings of shame may arise.

Addictive behaviors are one of the most common manifestations of shame as it relates to family dynamics, and even in individuals who successfully complete family treatment for substance abuse, addictive dynamics often remain as the experience of shame is ignored in this treatment (Fossum & Mason, 1986). These realities of treatment suggest effective treatment must address feelings of shame, and research examining the

direct relationships between parenting behaviors that impact feelings of shame can assist clinicians in knowing how to address shame in the family system.

Review of relevant literature provides indication of the relationships between self-esteem, GSE, ASE, and shame, as well as the empirical evidence relating the constructs to subsequent substance abuse. However, despite these similarities, each of these constructs remains distinct, offering an argument for utilizing self-esteem, GSE, ASE, and shame to empirically define the larger concept of feelings of inferiority. No empirical research exists to operationally define the construct of feelings of inferiority, and no research has been conducted examining the direct relationships between feelings of inferiority and substance abuse in TAY. Researchers claim an association between self-esteem, GSE, ASE, shame, and substance abuse (e.g. Marlatt, 1985a; Parker & Benson, 2004; Tangey & Dearing, 2002), thus these constructs may adequately define feelings of inferiority in such a way that allows for the examination of the influence of these feelings on substance abuse in the TAY population.

Conclusion

Researchers have identified the concerning rates of substance abuse amongst the TAY population (NIDA, 2014; Pottick, et al., 2014). TAY experience a host of developmental transitions that may increase their vulnerability to substance related concerns (Pottick, et al., 2014; Wilens & Rosenbaum, 2013); however, a variety of treatment barriers exist in this population (Davis, 2003), making successful intervention difficult. Because TAY continue to utilize parents as a resource during this time of

transition (e.g. Davis, 2003), better understanding of the impact of parenting behaviors on substance abuse in TAY is warranted.

As a theory that emphasizes the importance of the individual, perceptions of the family environment, and the impact of early experiences (Mosak & Maniacci, 1999; Sweeney, 2009), Adlerian theory may be a useful lens from which to examine the relationship between parenting behaviors and substance abuse in the TAY population. In reviewing the literature, is appears noteworthy to examine the impact of parental pampering and feelings of inferiority on substance abuse in TAY; however, empirical evidence defining these constructs is lacking in the research.

Pampering may be a function of parenting behaviors such as enabling, low levels of autonomy granting, high levels of parental care, and parental behavioral control, or overprotection (e.g. Lynch, et al., 2002; Biggam & Power, 1998; Yahav, 2006). These behaviors, in turn, may directly impact substance abuse by relieving the TAY from taking responsibility for his own choices and behaviors (Arnold, 1987; Kaplan, 1985). However, along with parental psychological control, they may also indirectly impact the abuse of substances by promoting feelings of inferiority in TAY by sending messages of inadequacy to the individual (Barber, 1996; Biggam & Power, 1998; Yahav, 2006). In this way, feelings of inferiority may partially mediate the relationship between pampering and substance abuse.

Feelings of inferiority may be defined using the constructs of self-esteem, GSE, ASE, and shame. Although related, these distinct constructs provide examples of feelings of incompetence, inability, and lack of acceptance by society, which have been

linked to feelings of inferiority (e.g. Dreikurs, 1990; Marlatt, 1985a; Tangey & Dearing, 2002). Individuals may turn to substances as a coping mechanism for these painful feelings (Adler, 2005).

Currently, there is a lack of research to both empirically define the Adlerian concepts of pampering and feelings of inferiority, as well as scarcity of evidence exploring direct relationships between pampering, parental psychological control, feelings of inferiority, and substance abuse in TAY. The present study aims to provide both operational definitions as well as evidence of these direct relationships in order to affect the way in which substance abuse treatment is provided to TAY. Changes in the way in which treatment is provided can a more holistic treatment to a population who experiences significant barriers in receiving the treatment they need.

Summary

In this chapter, a review of the relevant literature was presented to discuss the scope of the problem of substance abuse in TAY, the appropriateness in examining this problem from an Adlerian perspective, and potential constructs to define and explore direct relationships between the Adlerian constructs of pampering and feelings of inferiority and substance abuse. In the current study, a model is proposed that provides manifest variables that make up the latent constructs of pampering and feelings of inferiority, and identifies potential direct relationships between pampering, parental psychological control, feelings of inferiority, and substance abuse. In Chapter III, the methodology for the present study, including research questions, hypotheses, instrumentation, sample, and data collection procedures, will be discussed.

CHAPTER III

METHODOLOGY

In Chapter I, research questions were presented to examine the relationship between parental pampering, parental psychological control, inferiority feelings, and substance abuse in a college sample of TAY. In Chapter II, a review of relevant literature revealed a lack of empirical research that operationally defines the Adlerian constructs of pampering and inferiority, as well as a lack of research examining direct relationships between parenting behaviors and subsequent substance abuse amongst the TAY population. As such, the current study contributes to the literature in two ways. First, the current study attempts to provide empirically validated definitions for the latent constructs of pampering and inferiority. The appropriateness of measuring parental pampering using the observed constructs of enabling, autonomy granting, parental care, and parental behavioral control, and the appropriateness of measuring inferiority feelings using the observed constructs of self-esteem, general self-efficacy (GSE), abstinence self-efficacy (ASE) and shame were investigated. Second, the direct relationship between parental pampering, parental psychological control, inferiority feelings, and substance abuse was examined. In the present chapter, the research hypotheses, participants, instrumentation, procedures for data collection, and the proposed data analyses for the study are outlined. Finally, the results of the pilot study are presented and discussed

Research Questions and Hypotheses

The following research questions and hypotheses are proposed

Research Question 1: Do the observed constructs of enabling, autonomy granting, parental care, and parental behavioral control measure the latent construct of parental pampering?

Hypothesis 1: It is hypothesized that enabling, autonomy granting, parental care, and parental behavioral control will adequately measure parental pampering.

Research Question 2: Do the observed constructs of self-esteem, GSE, ASE, and shame measure the latent construct of inferiority feelings?

Hypothesis 2: It is hypothesized that self-esteem, GSE, ASE, and shame will adequately measure inferiority feelings.

Research Question 3: What is the relationship between perceptions of parental pampering, perceptions of parental psychological control, inferiority feelings, and substance abuse?

Hypothesis 3a: A positive and significant relationship will exist between perceptions of parental pampering and inferiority feelings.

Hypothesis 3b: A positive and significant relationship will exist between perceptions of parental pampering and alcohol abuse.

Hypothesis 3c: A positive and significant relationship will exist between perceptions of parental pampering and drug abuse.

Hypothesis 3d: Perceptions of parental psychological control will positively and significantly relate to inferiority feelings.

Hypothesis 3e: A positive and significant relationship will exist between inferiority feelings and alcohol abuse.

Hypothesis 3f: A positive and significant relationship will exist between inferiority feelings and drug abuse.

Research Question 4: Do inferiority feelings mediate the relationship between parental pampering and substance abuse?

Hypothesis 4a: Inferiority feelings will partially mediate the positive relationship between perceptions of parental pampering and alcohol abuse.

Hypothesis 4b: Inferiority feelings will partially mediate the positive relationship between perceptions of parental pampering and drug abuse.

Research Question 5: Are there differences in the strength of relationships within the proposed model for those who have ever received treatment for substance abuse and those who have not?

Hypothesis 5: It is expected that there will be significant differences in the strength of relationships within the model for individuals who have had treatment for substance abuse than for those who have not had treatment for substance abuse.

Participants

Participants for the study were recruited from a mid-sized public university located in the Southeastern United States. To obtain a sample from the TAY population, convenience sampling from classes within this University was used to collect the data. Although TAY have been described as individuals between the ages of 16 and 25

(Kenney & Gillis, 2008), for the purposes of this study age requirements were restricted to individuals at least 18 years of age in order for the participants to provide legal consent for participation.

To determine sample size, general guidelines for the use of Structural Equation Modeling (SEM) and linear multiple regression were considered. According to Kline (2011), sample size should be determined based on the complexity of the model; however, a minimum of 200 observations is suggested. More complex models, with more parameters, require larger sample sizes, thus, a ratio of observations per parameter is recommended in order to ensure reasonably stable data. Ideally, a ratio of 20:1 is proposed; however, 10:1 is considered acceptable (Kline, 2011).

Given the complexity of the proposed model, the ratio of 10:1 observations per parameter was utilized to determine sample size in the current study. The research questions are based on a structural regression model that consists of 21 parameters, including direct paths and disturbance variances. Utilizing the ratio of 10:1 observations per parameter and, given the number of parameters (21), the researcher aimed for a minimum of 210 participants (Kline, 2011). Research Question 5 attempts to assess for differences in the model between individuals who were in treatment for substance abuse as adolescents and those who were not. In order to examine these differences, the researcher aimed to run separate SEM analyses for participants reporting a history of substance abuse treatment and participants denying a substance abuse treatment history. In order to run both SEM analyses, a minimum of 210 participants was needed in each group (a minimum of 420 participants total). If the researcher is unable to obtain the

needed sample size to run the SEM, a multiple regression was proposed to examine Research Question 5. A minimum of 114 participants per group is required to run a multiple regression on the proposed model with adequate power (G*Power; Faul, Erdfelder, Lang, & Buchner, 2007).

Instrumentation

The instrumentation for the study consisted of (a) the Lynch Enabling Survey for Parents (LESP; Lynch, et al., 2002), (b) 10 items from the Parent Behavior Measure (PBM; Bush, Peterson, Cobas, & Supple, 2002), (c) the Parental Bonding Instrument (PBI; Parker, Tupling, & Brown, 1979), (d) the Psychological Control Scale—Youth Self-Report (PCS-YSR; Barber, 1996), (e) the Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965), (f) the New General Self-Efficacy Scale (NGSE; Chen, Gully, & Eden, 2001), (g) the 12-item version of the Alcohol Abstinence Self-Efficacy Scale (AASE; McKiernan, Cloud, Patterson, Golder, & Besel, 2011), (h) the Internalized Shame Scale (ISS; Cook, 1989), (i) the Alcohol Use Disorder Identification Test (AUDIT; Babor, Higgin-Biddle, Saunders, & Monteiro, 2001), (j) the Drug Abuse Screening Test (DAST; Skinner, 1982), and (k) a brief demographics form. For each instrument assessing perceptions of parenting behaviors (BES, PBI, and PCS-YSR), participants were asked to respond to questions based on who they consider to be their primary caregiver growing up; in other words, participants responded to questions as they relate to the caregiver with whom they had the *most* interaction during childhood and adolescence. Each instrument utilized is described below.

Enabling

Enabling was measured using the Lynch Enabling Survey for Parents (LESP; Lynch et al., 2002). The LESP was developed as a method of differentiating between parental enabling and non-enabling behaviors. It consists of 40 items to which respondents answer on a 4-point Likert-type scale ranging from agree to disagree. The instrument contains 20-items that reflect enabling behaviors and 20-items that reflect non-enabling behaviors and, as such, the non-enabling items are reversed scored, resulting in a possible score ranging from 40 (extremely non enabling) to 160 (extremely enabling; Lynch et al., 2002).

The items on the LESP reflect possible parental responses to child behaviors in various situations and the instrument is intended as a self-report evaluation taken by parents (Lynch et al., 2002). For the purposes of this study, questions will be altered to reflect perceptions of how a parent might respond in a given situation and will be administered to the child, rather than the parent. Instructions for the LESP direct parents to choose the response that best fits their parenting philosophy (Lynch et al., 2002). Thus, instructions will be modified to direct participants to choose the response that best fits their perception of their parent's philosophy of parenting. For example, an item that reads "My ten-year-old has missed the bus for the third time. I call a cab and take the fare out of his/her allowance" (Lynch et al., 2002) will be modified to read "If as a ten-year-old, I missed the bus for the third time, my parents would have called a cab and taken the fare out of my allowance."

The LESP has been found to be both a reliable and valid measure of parental enabling behaviors. Prior to administering the instrument, the authors established content validity by having three experts (a professor of psychology/director of an adolescent drug abuse inpatient setting, and two practitioners knowledgeable in assessing codependent and enabling behaviors) on enabling examine the content and format. Additionally, significant differences were found between mean total scores (93.4 for enablers, 58.8 for non-enablers, $t(8) = 18$, $p < .0001$) when the LESP was administered to parents identified as demonstrating enabling behaviors and parents identified as demonstrating non-enabling behaviors, suggesting the instrument exhibits construct validity (Lynch et al., 2002).

Multiple strategies were employed to assess the reliability of the LESP. Examination of the split-half reliability ($r = .84$, $p < .0001$) and the test-retest reliability ($r = .92$, $p < .0001$) suggested moderate to high reliability of the instrument (Lynch et al., 2002). Factor analysis was conducted to explore the structure of the LESP. Results established a four-factor structure consisting of direct enabling, indirect enabling, direct non-enabling, and indirect non-enabling that explained 85.6% of the variance. Reliability was also examined for each of the four factors, resulting in coefficients ranging from .69 to .81, indicating moderate reliability for the individual factors (Lynch et al., 2002). Further analyses were conducted using the LESP to examine differences in parental enabling behaviors amongst at-risk and honors students. The authors conducted a factor analysis during this research to further validate the LESP, finding confirmation of a four-factor structure accounting for 84.3% of the variance and with reliability coefficients for

the four factors ranging from .81 to .98 (Lynch et al., 2002). For the purpose of this study, the entire LESP scale will be used.

Autonomy Granting

Autonomy granting was assessed using 10 items from the Parent Behavior Measure (PBM; Bush et al., 2002). The PBM is a self-report instrument that examines adolescent perceptions of various parenting behaviors (e.g., support, monitoring, punitiveness). The items for each of the scales that compose the PBM were selected from previously existing measures that demonstrated high factors loadings for the respective scales (Bush et al., 2002). The 10 items comprising the autonomy granting scale evaluate adolescent perceptions of the amount of independent decision making and self-reliance parents afford the adolescent (Supple et al., 2009). These items were developed based on Sessa and Steinbeg's (1991) research that discusses the progression of self-direction in youth. Participants respond to each item on a 4-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree), with higher scores indicating higher levels of autonomy granting (Supple et al., 2009).

Initial examination of the reliability of the 10 autonomy granting items yielded a Cronbach's alpha of .85 for both mothers and fathers (Bush et al., 2002), suggesting good internal consistency. Supple et al. (2009) explored the internal consistency in samples from China, Mexico, India, and the United States to further confirm the reliability of these items across diverse populations, and found Cronbach's alphas ranging from .76 to .79 in the China, Mexico, and India samples, and .84 (for mothers) and .87 (for fathers) in the United States samples.

The 10 autonomy granting items were found to load onto a single factor across the diverse samples examined by Supple et al. (2009), suggesting a unidimensional instrument. Additionally, examination of model fit in each sample demonstrated good overall fit for both mother and father data in the United States sample (CFI > .96, RMSEA < .05) and acceptable model fit in the other samples (CFI ranged from .91 to .93, RMSEA ranged from .06 to .07; Supple et al., 2009).

Finally, Supple et al. (2009) assessed construct validity and functional equivalence of the 10 autonomy granting items by correlating them with the criterion variables of parental support, parental love withdrawal, and adolescent academic orientation. Results indicated functional equivalence across samples between maternal autonomy granting, maternal support, and academic orientation; however functional nonequivalence was found between maternal autonomy granting and maternal love withdrawal (χ^2 *difference* = 9.77, *df* = 3, $p < .05$). For fathers, associations between autonomy granting and academic orientation were stable; however, variations existed between paternal autonomy granting and paternal support (χ^2 *difference* = 18.81, *df* = 3, $p < .001$) and paternal autonomy granting and paternal love withdrawal (χ^2 *difference* = 16.48, *df* = 3, $p < .01$). The researchers suggest these results indicate that a majority of the items represent relevant characteristics of autonomy granting across diverse cultures (Supple et al., 2009).

Parental Care and Parental Behavioral Control

To measure perceptions of parental care and parental behavioral control, the Parental Bonding Instrument (PBI; Parker et al., 1979) was used. The PBI is a two-factor

instrument that can be used in clinical or nonclinical populations to measure perceived parental care and parental control/protection (Parker, 1990). The measure consists of two subscales, care and protection, totaling 25-items that are answered on a 4-point Likert scale ranging from 0 (very unlike) to 3 (very like) (Parker et al., 1979). The care scale is comprised of 12-items that rate parental care on a continuum from emotional warmth, acceptance, and empathy to emotional coldness and rejection (Gladstone & Parker, 2005; Parker, 1983). Similarly, the protection scale contains 13 items rating parenting behaviors on a range from parental encouragement of autonomy and independence to parental control and intrusiveness (Gladstone & Parker, 2005; Parker, 1983). Per the instrument's instructions, respondents are asked to complete each question as they recall parenting behaviors from their first 16 years of life in order to highlight the manner in which these parenting behaviors may have impacted development (Gladstone & Parker, 2005). Researchers who have questioned the reliability of this retrospective recall technique have found the instrument to have good test-retest reliability over a 25-year timespan (Gladstone & Parker, 2005). Additionally, because perceptions of parenting behaviors are thought to have a stronger impact on development than actual parenting behaviors (Parker, 1990), the PBI is designed to measure perceived parenting behaviors; however, researchers have used corroborative reports from parents and siblings to establish the validity of reported perceptions, suggesting perceptions of parenting behaviors reported on the PBI are closely linked to actual parenting behaviors (Parker, 1990). Separate forms exist for perceptions of mothers and fathers, although initial data analyses suggest general parenting characteristics, rather than differing characteristics for

mothers and fathers (Parker, 1983). In the current study, participants will only complete one form, indicating the person they consider to be their primary caregiver.

The PBI has been found to have both good reliability and validity. During initial examination of the instrument's psychometric properties in a nonclinical sample, moderate test-retest ($r = .76$, $p < .001$ for care; $r = .63$, $p < .001$ for protection) and split-half ($r = .88$, $p < .001$ for care; $r = .67$, $p < .001$ for protection) reliability were found (Parker, 1983). In a sample of clinically depressed participants, test-retest scores yielded correlation coefficients of $r = .87$ for care and $r = .92$ for protection (Parker, 1983). Some concern has been identified regarding possible fluctuations in parenting behaviors throughout such a large period of development (through age 16); however, Parker (1983) asserted the instrument can be considered reliable as, though some variance may exist in parenting behaviors, the behaviors are relatively consistent over time.

As a method of assessing the validity of the instrument in measuring *perceived* parenting behaviors, respondents participated in qualitative interviews exploring their perceptions of the emotional relationship with each parent and the amount of independence they perceived each parent to provide (Parker, 1983). These qualitative interviews were then examined using content analysis. The inter-rater reliability scores obtained from the content analysis were then correlated with scores from the PBI subscales. Results for the care scale were $r = .78$, $p < .001$ for the first rater and $r = .77$, $p < .001$ for the second rater, whereas results for the protection scale were $r = .50$, $p < .001$ for the first rater and $r = .48$, $p < .001$ for the second rater (Parker, 1983). As a method of evaluating the construct validity of the PBI, the instrument was correlated with measures

of social desirability, the degree to which the child "likes" the parent, and depression (Parker, 1983). Small but significant positive correlations were found between social desirability and care (r = .19 for mothers; r = .03 for fathers), whereas small but significant negative correlations were found between social desirability and protection (r = -.19 for mothers; r = -.14 for fathers) (Parker, 1983). These results are consistent with the assertion that those attempting to present in a more positive manner would inflate responses indicating high levels of care and low levels of protection. Similarly, in a non-clinical sample, greater reports of liking a parent were positively associated with parental care (r = .66 for mothers; r = .62 for fathers) and negatively associated with parental protections (r = -.46 for mothers; r = -.42 for fathers). Finally, scores on the PBI were not significantly different between individuals reporting high levels of depression and individuals reporting low levels of depression, suggesting responses are not impacted by level of depression (Parker, 1983).

Parental Psychological Control

The Psychological Control Scale—Youth Self-Report (PCS-YSR; Barber, 1996) was used to measure parental psychological control in the current study. The PCS-YSR is an 8-item self-report measure that allows youth to report perceptions of parental psychological control (Barber, 1996). After performing a factor analysis on the original 16-item measure, the final version was reduced to the current 8-items that assess behaviorally specific aspects of psychological control, including constraining verbal expression, invalidating feelings, personal attack, and love withdrawal (Barber, 1996). Responses to each item are recorded on a 3-point Likert scale ranging from 1 (not like

her/him) to 3 (a lot like her/him), with higher scores indicating higher levels of psychological control (Barber, 1996). To date, the PCS-YSR has been used mainly with adolescents and has not been used retrospectively.

Initial data were normed using a large, diverse, nonclinical population of adolescents in the 5th and 8th grades, suggesting the instrument may be an effective tool for use cross-culturally (Barber, 1996). The measure was found to have moderate internal consistency reliability, with Cronbach's alpha scores ranging from $\alpha = .80$ to .83, when examining parent-child dyads by gender (e.g., mother/son) (Barber, 1996). Researchers examining the impact of childhood aggression on parenting behaviors used the PCS-YSR to explore adolescent perceptions of parental psychological control and found similar internal consistencies ($\alpha = .79$ for mothers and $\alpha = .82$ for fathers) (de Haan, Soenens, Dekovic, & Prinzie, 2013). Construct validity for the PCS-YSR was established using factor analysis. Separate analyses were run based on the different genders of parent-child dyads, income, race, and religious affiliation, each demonstrating an 8-item single factor structure that includes characteristics of each of the theoretical aspects found to be associated with psychological control (invalidating feelings, constraining verbal expressions, personal attack, and love withdrawal) (Barber, 1996). Additionally, the PCS-YSR was found to negatively correlate with measures of behavioral control, further validating the measure (PCS-YSR).

Self-Esteem

The Rosenberg Self-Esteem Scale (RSES) is a 10-item, self-report instrument intended to measure self-esteem as a global concept (Rosenberg, 1965). The instrument

was created using the Guttman Scale to ensure that it would measure self-esteem as a unidimesional construct along a continuum from low to high self-esteem, and was normed using a large sample of junior high students (Rosenberg, 1965). Since its development, the RSES has been utilized in a variety of populations, translated into multiple languages, and is one of the most widely accepted measures of self-esteem (Heatherton & Wyland, 2003), suggesting its usefulness with diverse populations. Respondents report both positive and negative feelings about the self by answering each question on a 4-point Likert-type scale ranging from strongly agree to strongly disagree (Rosenberg, 1965).

The RSES is considered to have moderate to high test-retest reliability (.85), which is expected due to the reported reproducibility of the measure (92%) (Rosenberg, 1965). Additionally, internal consistency for the RSES is reported to be $\alpha = .92$ (Heatherton & Wyland, 2003). Rosenberg correlated the scale with other constructs that have been theoretically associated with self-esteem in order to determine construct validity (Rosenberg, 1965). Chi-square analyses revealed that the RSES showed significant correlations with depression, neuroticism, anxiety, report of psychosomatic symptoms, feeling as if others hold low opinions of the individual, and not feeling well thought of at the $p < .05$ significance level; however, specific values for the correlation coefficients were not reported (Rosenberg, 1965).

General Self-Efficacy

GSE was measured using the New General Self-Efficacy Scale (NGSE; Chen et al., 2001). The NGSE was developed in response to a lack of valid and reliable

measurement of GSE (Chen et al., 2001) and aims to measure "one's belief in one's overall competence to effect requisite performance across a wide variety of achievement situations" (Eden, 2001). The NGSE is comprised of 8 items that are measured on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), with higher scores indicating higher levels of GSE (Scherbaum et al., 2006).

The NGSE has been found to be a unidimensional instrument that is both reliable and valid (Chen et al., 2001). To determine the psychometric properties of the NGSE across cultures, the authors conducted three distinct studies using two samples of undergraduate students in the United States and a sample of managers enrolled in an MBA program at an Israeli university (Chen et al., 2001). Results from principle components analyses at two time points in a study using undergraduate students yielded evidence for a single-factor solution (e.g., eigenvalues = 4.17 and 4.76, accounting for 52% and 59% of the total variance). Cronbach's alpha in each study ranged from .85 to .91, suggesting high internal consistency. Additionally, in all three studies, the NGSE was administered at multiple time points to further assess for test-retest reliability, with results suggesting the instrument is moderately stable over time (r = .62 to .86; Chen et al., 2001).

Content validity of the NGSE was assessed using panels of undergraduate students and graduate students in the United States, and graduate students in Israel (Chen et al., 2001). Panels were provided the items from the NGSE, the general Self-Efficacy Scale (SGSE) and the Rosenberg Self-Esteem Scale (RSES), as well as definitions for GSE and self-esteem. Panelists were asked to identify which definition (GSE, self-

esteem, or other) best represented each item from the three instruments. In each panel, a majority of items were correctly sorted within their respective definitions (e.g., 87% to 98% of respondents sorted NGSE items under the GSE definition), providing evidence of both discriminant and content validity (Chen et al., 2001). The researchers conducted a confirmatory factor analysis to determine whether GSE and self-esteem are distinct constructs due to high item correlations between the NGSE and RSES ($r = .75$, $p < .05$). Results of the CFA in which the NGSE, the SGSE, and the RSES were free to correlate indicated that GSE and self-esteem are separate, but related constructs ($\chi^2 = 144.31$), providing additional evidence of discriminant validity. Finally, because in theory, GSE is thought to be positively related to situational self-efficacy (SSE; Chen et al., 2001), the researchers examined the predictive validity of the NGSE on occupational SSE and exam SSE. The NGSE was found to be positively and significantly related to occupational SSE ($\phi = .15$ to $.43$, $p < .001$) and to significantly predict subsequent exam SSE ($\beta = .44$, $p < .01$; Chen et al., 2001).

Abstinence Self-Efficacy

To assess for ASE, a 12-item brief version of the Alcohol Abstinence Self-efficacy Scale (AASE; McKiernan et al., 2011) was used. This brief measure is modeled after the AASE, which was created to evaluate self-efficacy in relation to abstinence from alcohol and has been found to be a psychometrically sound method of assessing ASE (DiClemente et al., 1994). The original 40-item measure uses four categories of high-risk situations (negative affect, social interactions and positive states, physical and other concerns, and withdrawal and urges) to assess an individual's confidence and temptation

to use alcohol on a 5-point Likert scale ranging from 1 (not at all) to 5 (extremely) (McKiernan et al., 2011). The 12-item version of the AASE follows the same structure and includes 6 items assessing confidence and 6 items assessing temptation on the same 5-point Likert scale. Total ASE score is calculated by subtracting the temptation score from the confidence score (McKiernan et al., 2011). The 12-item AASE also includes drug use in each question in addition to alcohol, for example "How tempted would you be to drink or use drugs when you are emotionally upset (feeling down, angry, afraid, or guilty)?" (McKiernan et al., 2011). Finally, the brief measure was normed using a racially diverse clinical population; however, a majority of participants were male (McKiernan et al., 2011), suggesting the need to examine the psychometrics in the current study in order to validate reliability and validity in a nonclinical, college population.

Initial analysis of the 12-item AASE's psychometric properties suggested the instrument is both a valid and reliable measure of ASE (McKiernan, et al., 2011). The instrument's structure was analyzed using factor and item analysis, confirming a two-factor structure in which the factors of temptation and confidence were negatively correlated. Loadings for the confidence factor ranged from .62 to .88 and loadings for the temptation factor ranged from .62 to .82 (McKiernan et al., 2011). Internal consistency was assessed to evaluate reliability of the instrument. Alpha coefficients for both scales (α = .916 for confidence, α = .878 for temptation) suggest good reliability of the measure; however, internal consistency for the total self-efficacy score was not reported (McKiernan et al., 2011). Finally, to establish concurrent validity, the authors correlated

the confidence (r = .811), temptation (r = .792), and total self-efficacy (r = .835) scores of the 12-item and 40-item version of the AASE.

Shame

The construct of shame was measured utilizing a trait-based measure of shame, called the Internalized Shame Scale (ISS; Cook, 1987). The ISS assesses shame-proneness by identifying shame as an internalized trait infused within one's identity (Tangey & Dearing, 2002), and is reported to be useful for measuring shame in both adolescents and adults (del Rosario & White, 2006). The ISS is a self-report measure that consists of 30-items and two subscales: shame (24-items) and self-esteem (6-items) that are answered on a 4-point Likert scale ranging from 0 (never) to 4 (almost always) (del Rosario & White, 2006). Total shame scores are calculated using only the 24 shame items, with higher scores indicating higher levels of shame. The purpose of the self-esteem items is only to reduce response set bias (Cook, 1996). Questions for the self-esteem scale are adapted from the Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965); however, the subscale is not intended to be an independent measure of self-esteem (del Rosario, 2006). Given this, although all 30-items of the ISS will be provided to participants, only responses from the 24-item shame scale will be used and scored in this study.

Reliability and validity of the ISS have been examined in both clinical and nonclinical populations (Cook, 1996; del Rosario & White, 2006; Rybak & Brown, 1996). Because the ISS attempts to measure a trait-based measure of shame, the instrument demonstrates high test-retest reliability. Multiple researchers have confirmed

this, finding test-retest reliabilities ranging from $r = .81$ to .84 for the shame scale, and $r = .69$ to .71 for the self-esteem scale. Internal consistency for the two subscales ranges from $\alpha = .95$ to .97 for the shame scale and $\alpha = .88$ to .90 for the self-esteem scale (del Rosario & White, 2006; Rybak & Brown, 1996). Reliability for the scale as a whole was not reported; however, this may be because the self-esteem items are not included in the total shame score (Cook, 1996). Construct validity for the ISS was determined by correlating the instrument with measures of constructs theoretically connected to shame, such as anxiety, depression, hostility, and positive affect using the Multiple Affect Adjective Check List-Revised (MAACL-R). Significant positive correlations were found between the ISS and anxiety ($r = .69$, $p < .0001$), depression ($r = .72$, $p < .0001$) and hostility ($r = .53$, $p < .0001$), and a significant negative correlation was found between the ISS and positive affect ($r = -.56$, $p < .0001$) (Rybak & Brown, 1996). Similarly, concurrent validity was established by correlating the ISS to other known measures of shame and guilt, such as the Personal Feelings Questionnaire (PFQ), the Self-Conscious Affect and Attribution Inventory (SCAAI), the Test of Self-Conscious Affect (TOSCA), and the Mosher Guilt Scale. Results of these correlations ranged from .39 to .64 (Cook, 1996). Some researchers have questioned the discriminant validity of the ISS, reporting some ambiguity between the shame and self-esteem constructs and suggesting clearer distinction between the two constructs (Tangey & Dearing, 2002).

Alcohol Abuse

For the purposes of the current study, alcohol abuse was measured utilizing the Alcohol Use Disorders Identification Test (AUDIT; Babor et al., 2001). The AUDIT is a

screening instrument that was developed to assess for risky alcohol use across a variety of ages, genders, and cultures (Babor et al., 2001). This instrument asks respondents to report their use of alcohol over the past year, with higher scores indicating riskier alcohol use. Although scores of 8 or higher are considered the clinical cutoff suggesting harmful drinking behavior (Babor et al., 2001), the total score, where higher scores equate greater likelihood of harmful drinking patterns, will be used in the current study (Babor et al., 2001). The AUDIT is comprised of 10-items, seven of which are scored on a 5-point scale of frequency from 0 (never) to 4 (almost daily). One item examines number of drinks on a 5-point scale from 0 (1 to 2) to 4 (10 or more), and the final two items score on a 3-point range from 0 (No), 1 (Yes, but not during the last year), and 2 (Yes, during the last year) (Babor et al., 2001).

The AUDIT has been normed on several diverse populations and has been found to have high internal consistency (α = .87 to .90) and test-retest reliability (.85) when normed on a university population (Conley, 2006). The instrument has also been found to correlate (r = mid .80's to mid .90's) with other measures of alcohol use, such as the Michigan Alcohol Screening Test (MAST) and the CAGE questionnaire (Babor et al., 2001), providing construct validity.

Drug Abuse

In addition to alcohol abuse, the current study also measured drug abuse using the Drug Abuse Screening Test (DAST; Skinner, 1982). The DAST is a 28-item instrument that was created to parallel the Michigan Alcoholism Screening Test (MAST), an instrument frequently used to examine alcohol abuse in both clinical and non-clinical

settings (Selzer, 1971). Prior to the development of the DAST, several instruments were proven reliable in measuring drug abuse amongst non-clinical populations; however, drug abuse amongst clinical populations lacked a valid and reliable instrument. The DAST was created to fill this need and, although it was initially normed using a clinical population, it has since been used with a variety of populations, including psychiatric patients, workplace screening (for both identified drug users and nonusers), minority women, and patients identified as abusing substances (Skinner, 1982; Yudko, Lozkina, & Fouts, 2007). The DAST has also been validated as useful in treatment and evaluation research (Yudko et al., 2007).

The DAST is a self-report measure which aims to identify problematic use of drugs as indicated by the use of prescribed medications in any way other than as directed or any non-medical use of drugs (Skinner, 1982). It is comprised of 28-items to which respondents answer either "yes" or "no." Total scores range from 0-28, with one point assigned for any response that endorses problematic use of drugs (Skinner, 1982). More specifically, each "yes" response indicates one point, except for items 4, 5, and 7, which are reverse scored, and higher scores equal more problematic drug use. Cutoff scores indicating problematic drug use have varied depending on the population. Typically, a cutoff score of 6 is recommended (Yudko et al., 2007); however, for the purposes of this study, the total scale score will be used.

The DAST is considered a highly reliable instrument (Skinner, 1982; Yudko et al., 2007). Several researchers have examined the internal consistency of the DAST and found α coefficients ranging from .92 to .94 and moderate to high item-total correlations

ranging from .24 to .78 (Skinner, 1982; Yudko et al., 2007). Additionally, in a sample of union members taking the DAST for the purposes of employment drug screening, test-retest reliability was found to be .85 (Yudko et al., 2007). Although initial exploratory factor analysis (EFA) identified the DAST as a unidimensional instrument with a single factor accounting for 45.4% of the variance (Skinner, 1982), use of the measure as a five-factor structure has also been proposed (Yudko et al., 2007). Subsequent researchers have found four additional factors with associated eigenvalues greater than one; however, because a majority of the variance is accounted for by the first factor, the DAST continues to be considered a single-factor instrument (Yudko et al., 2007). Possible explanations for the differences in variance amongst researchers could be due to differing sample sizes, most of which have not been large enough to provide excellent reliability (Yudko et al., 2007).

Additionally, the DAST has been found to be a valid instrument (Skinner, 1982; Yudko et al., 2007). The DAST was originally correlated with three measures of response bias often associated with substance abuse (denial, social desirability, and infrequency), with results indicating modest correlations, the largest of which was found between the DAST and social desirability (Skinner, 1982). These results suggest the DAST to be a face valid instrument (Yudko et al., 2007). Criterion validity was examined by correlating the DAST with other measures of problematic substance abuse, such as the MAST. Significant positive correlations, ranging from .31 to .59 have been found between the DAST and other measures of problematic substance abuse, while significant inverse relationships ranging from -.13 to -.21 have been found between the

DAST and measures of problematic alcohol use (Skinner, 1982; Yudko et al., 2007). Additionally, when examined with frequency of drug use in the past 12 months, the DAST demonstrated significant correlations ranging from .19 to .55 (Yudko et al., 2007). Furthermore, construct validity was established by correlating the DAST with measures of psychiatric disorders known to be associated with substance abuse (e.g., depression, interpersonal problems, impulse expression, social deviation), with results yielding significant results ranging from .25 to .54 (Yudko et al., 2007). Finally, the DAST demonstrates discriminate validity as evidenced by sensitivity scores ranging from 80.9% to 96% when using 6 as the cutoff score, and specificity scores ranging from 71% to 93.9% (Yudko et al., 2007).

Demographics Questionnaire

A socio-demographic form was developed by the researcher to collect a range of socio-demographic information from participants. The demographics questionnaire consists of 12-items exploring participant age, gender, race/ethnicity, year in college, current residence, age of first alcohol use, age of first drug use, peer substance use, family history of substance abuse, and any current or prior history of counseling services that have addressed substance abuse. Additionally, prior to completing the survey packet, participants are asked the number of caregivers in the household during childhood and the identity of the person whom they considered to be the primary caregiver during childhood. Responding to these questions prior to completing the survey packet will allow participants to be responding to parenting questions based on the individual they indicated as their primary caregiver. The purpose of the collected demographic

information is to describe the sample and control for specific predictors that have been linked to substance abuse in existing literature. The data collected regarding history of substance abuse treatment contributed to the analysis of Research Question 5.

Procedures

Convenience sampling was used to recruit participants for the study. The researcher recruited participants from nine undergraduate classrooms in two departments on campus. Data was collected over a four-week timespan and included classes from the departments of Counseling and Educational Development (n = 7) and Public Health Education (n = 2). The researcher contacted the course instructors via email to explain the purpose of the study and to solicit permission to collect data within their classrooms. Once permission was obtained from instructors, Institutional Review Board (IRB) approval was sought for the study. Following IRB approval, the researcher visited the permitted classrooms to invite students to participate in the study.

Prior to agreeing to participate, the researcher provided informed consent outlining the purpose of the study, eligibility requirements, and ensuring confidentiality and the voluntary nature of the study. Due to the sensitive nature of the information being collected, a waiver of signed informed consent was requested from the IRB and students were assured that no identifying information would be connected with their responses. The researcher verbally explained the purpose of the study, any potential risks of participation, the importance of confidentiality, and voluntary participation. For those who were eligible and wished to participate in the study, survey packets were distributed in manila envelopes and, upon completion, students returned the survey packets in the

same envelopes to a box located at the front of the classroom to further protect the safety of responses. Additionally, students were informed that participation in the study was strictly voluntary and they could elect to cease participation at any time without penalty. Following this explanation, the researcher distributed the survey packets to the students electing to participate. The survey packets included the 193-items for response that took approximately 20-35 minutes to complete. Finally, because participation in the study required students to respond to items concerning the sensitive nature of substance abuse, participants were provided with a list of substance abuse resources (e.g., The Vacc Counseling and Consulting Clinic, The Counseling Center).

Data Analyses

In order to examine the proposed model of perceptions of parental pampering, perceptions of psychological control, inferiority feelings, and substance abuse, several analytic strategies were employed. First, data was entered into SPSS Statistics v20 to investigate demographic data using descriptive statistics. Next, Cronbach's alpha was calculated to assess for internal consistency reliability of the data for the observed variables. Finally, analytic strategies addressing each research question was performed.

The first 4 research questions were entered into LISREL Version 8.8 Student Edition computer software program and analyzed using Structural Equation Modeling (SEM). In order to analyze Research Questions 1 and 2 Confirmatory Factor Analysis (CFA) was required, and Path Analysis was required for Research Questions 3 and 4. Because the proposed model contains both latent and manifest variables, it is considered a Structural Regression Model, making SEM an appropriate analysis as it allows the

researcher to conduct both a CFA and a Path Analysis within the same model (Kline, 2011). Utilization of SEM allows the researcher to examine if the proposed model is a fit for the data by performing a CFA to analyze the appropriateness of defining the latent variable using the observed variables, while also examining direct and indirect relationships amongst variables (Crockett, 2012; Kline, 2011). Model fit was determined using multiple indices of fit, including model Chi-Square, root mean square error of approximation (RMSEA), close fit index (CFI), and the standardized root mean square residual (SRMR) (Kline, 2011). If, according to CFA results, the observed variables do not adequately define the latent variables, Path Analysis will be conducted examining relationships between the observed variables in order to analyze Research Questions 3 and 4.

A three-step mediation analysis (Baron & Kenney, 1986) was conducted for Hypothesis 4. First, the researcher examined the relationship between parental pampering and substance abuse, followed by the relationship between parental pampering and inferiority feelings. Next, the relationship between inferiority feelings and substance abuse was examined to determine any changes in the strength of the relationships between parental pampering and substance abuse. Changes in the strength of the relationships would indicate a partial mediation; however, because only the relationship between parental pampering and substance abuse was significant, a partial mediation was not possible. Finally, because the number of participants who reported a history of substance abuse treatment did not provide adequate power to run an analysis ($n = 4$), Research Question 5 was not analyzed.

Pilot Study

The researcher conducted a pilot study in order to test the procedures of the proposed study. Examination of the proposed procedures allowed the researcher to make any necessary modifications to the full study based on the results of the pilot study. The aims of the pilot study were (a) to determine the length of time needed to complete the survey packet, (b) to obtain feedback about the clarity of survey items and directions, and (c) to examine the number of participants who indicate a history of substance abuse treatment as an adolescent for the purpose of determining feasibility in obtaining an adequate sample size to answer Research Question 5 in the full study.

Participants

Participants for the pilot study were restricted to first-year undergraduate students between the ages of 18 and 25 and were recruited from undergraduate courses in the Department of Counseling and Educational Development (CED 210: Career and Life Planning). The researcher aimed to enter two courses in order to obtain participants to adequately answer the specific aims of the pilot study. Five students in the two CED 210 courses were eligible to participate based on eligibility criteria. Despite the low number of eligible participants in the classes, the researcher had a 100% response rate from eligible participants and was able to answer the specific aims of the pilot study based on the participant responses and feedback.

Instrumentation

Nine of the eleven proposed instrumentation for the full study were utilized in the pilot study. Participants were asked to complete a 173-item survey packet including (a)

the 40-item Lynch Enabling Survey for Parents (LESP; Lynch et al., 2002), (b) the 25-item Parental Bonding Instrument (PBI; Parker, Tupling, & Brown, 1979), (c) the 8-item Psychological Control Scale—Youth Self-Report (PCS-YSR; Barber, 1996), (d) the 10-item Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965), (e) the 12-item version of the Alcohol Abstinence Self-Efficacy Scale (AASE; McKiernan, Cloud, Patterson, Golder, Besel, 2011), (f) the 30-item Internalized Shame Scale (ISS; Cook, 1989), (g) the 10-item Alcohol Use Disorder Identification Test (AUDIT; Babor, Higgin-Biddle, Saunders, & Monteiro, 2001), (h) the 28-item Drug Abuse Screening Test (DAST; Skinner, 1982), and (i) a 10-item brief demographics form. Items exploring peer use of substances and family history of substance abuse were not included in the demographic form utilized in the pilot study. Participants were given general directions to think only of their *primary caregiver* when responding to questions regarding perceptions of parenting (i.e. the LESP, the PBI, and the PCS-YSR). Primary caregiver was defined as the person whom they consider to have had the most parenting interaction during childhood and adolescence.

Following completion of the survey packet, participants were asked to complete a pilot study feedback form. The purpose of the feedback form was to obtain participant perspectives on the efficacy of the procedures, specifically, the clarity of the directions and items as some items and instructions on the instruments were slightly altered to inquire about hypothetical parenting situations or primary caregiver. The researcher aimed to determine the intelligibility of these altered items, and subsequently analyzed the statistical reliability and validity of the modified items.

Procedures

To recruit participants for the pilot study, the researcher contacted 9 instructors within the Departments of Counseling and Educational Development and Public Health at a mid-sized university in the Southeastern United States to obtain permission to collect data in their undergraduate courses, with the goal of entering into two courses. Eight of the contacted instructors agreed to allow the researcher to collect data in their courses and two courses within the Department of Counseling and Educational Development (CED 210: Career and Life Planning course) were chosen due to having the highest number of eligible participants. Once permission was granted, the researcher visited the classes on the agreed upon date to invite students to participate. The researcher obtained a waiver of informed consent from the IRB in order to decrease the likelihood of participants responding in a socially desirable manner. During class time, the researcher provided oral consent to eligible participants, described the purpose of the study, and explained the voluntary and confidential nature of the study. Additionally, any potential risks to participation were discussed and possible resources for follow-up counseling (if needed) were provided. Participants were assured they had the option to discontinue participation in the study at any point without penalty.

Students who agreed to participate were given a survey packet including the 173-items and the pilot study feedback form. To insure confidentiality, students returned the survey packet and the feedback form in a manila envelope in a box in the front of the classroom. Neither the survey packet nor the feedback forms requested participant names.

Data Analyses

Because the items in the LESP were altered to reflect participant perceptions of parenting behaviors, rather than parent perceptions of parenting behaviors, the researcher conducted an analysis using SPSS v20 to determine the reliability of the altered items. Cronbach's alpha measure of internal consistency was performed in order to determine the reliability of the LESP measure. To provide answers to the other purposes of the pilot (i.e., number of people receiving treatment as an adolescent, and time to complete the survey), descriptive statistics were run.

Results

The five participants who were involved in the pilot study completed the 173-item survey packet, as well as a pilot study feedback form. Of the measures included in the survey packet, no items were consistently left unanswered; however, three of the five participants indicated multiple caregivers when asked to identify their *primary* caregiver. Participants were asked how many caregivers were present in the home during *the majority* of their childhood/adolescence, and subsequently were asked whom they considered their primary caregiver during *the majority* of their childhood/adolescence. Participants were provided with a list of possible caregivers (e.g., mother, father, grandmother, uncle), and three participants indicated multiple caregivers, often inconsistent with the number provided in the previous item. It may be possible that participants responded based on any individual who was present in the household rather than whom they considered to be the primary caregiver, as no comments on the pilot study feedback forms indicated any difficulty understanding any of the directions or

items. In fact, all participants indicated that both the instructions and the items were clear and straightforward.

In addition to examining the clarity of directions and items in the survey packet, another aim of the pilot study was to determine the length of time necessary to complete the survey packet. Each of the five participants indicated it took between 20 and 25 minutes to complete the survey packet. A final aim of the pilot study was to determine the number of participants who indicated a history of substance abuse treatment as an adolescent in order to examine the feasibility of answering Research Question 5 in the full study. None of the five participants involved in the pilot study indicated a history of substance abuse treatment as an adolescent. Four participants indicated no treatment history and one participant chose not to respond to that item.

Finally, because items in the LESP were adjusted to reflect TAY perceptions of parenting behaviors, in addition to requesting feedback on the clarity of directions and items, the researcher conducted a test of internal consistency using Cronbach's alpha to determine reliability of the measure following the alterations. Despite the low power of utilizing five participants, the altered LESP was found to have high internal consistency ($\alpha = .822$).

Discussion

Examination of response patterns and the pilot study feedback form provided important information for modifications to the full study. The pilot study allowed the researcher to identify the length of time necessary to complete the survey packet, the clarity of the items and directions included in the survey packet, the reliability of the

altered LESP items, and the possibility of answering Research Question 5 in the full study.

The amount of time needed to complete the survey packet, as indicated by the participants, was 20-25 minutes, significantly less than the 35-45 minutes reported in the consent form. As a result of the findings, the researcher revised the recruitment script, the invitation to instructors, and the consent form to reflect the more accurate approximate time needed to complete the survey packet. These findings are beneficial in that more instructors may be willing to allow data collection in the classrooms as the time needed will not intrude on as much class time, and eligible students may be more willing to participate knowing the survey packet will not take a significant amount of time.

All participants in the pilot study indicated the directions and items contained in the survey packet were clear, straightforward, and easy to follow, feedback that was reinforced by a high internal consistency ($\alpha = .822$) for the altered LESP. However, three of the five participants incorrectly responded to the demographic question requesting identification of only one primary caregiver, suggesting that despite the clarity of items, some modifications to the full study may be necessary. In response to these findings, the demographic items related to number and identity of the primary caregiver were moved to the beginning of the survey packet, prior to the measures asking participants to respond only based on their primary caregiver, in order to further emphasize the individual whom the participant is perceiving when responding to items related to perceptions of parenting behaviors. Additionally, the question asking about the identity of the primary caregiver was altered to an open-ended format, with instructions

to identify only one person, in order to decrease multiple responses to the question. These findings provided important information to the researcher regarding how closely the instructions may have been read and moving the items to the beginning of the survey packet will potentially increase more accurate responding of only one primary caregiver.

Finally, the researcher aimed to determine the number of pilot study participants indicating a history of substance abuse treatment as an adolescent in order to verify the viability of examining potential differences in the strength of relationships in the proposed model for individuals who were in treatment for substance abuse as adolescents and those who were not. Four of the pilot study participants denied a history of substance abuse treatment as an adolescent and one participant declined to answer the question. These findings indicate it may be difficult to obtain the necessary sample to answer Research Question 5 in the full study. Thus, as a result, the question was modified from "were you ever in treatment for substance-related problems *as an* adolescent" to state "Are you currently, or have you ever been, in treatment (e.g., counseling, doctor) that has addressed issues related to substance use?" Amending the question in this way may increase the number of respondents who are able to respond positively, allowing for a higher likelihood of being able to answer Research Question 5. However, it is still possible that the researcher may not be able to obtain the sample necessary to answer Research Question 5. If, after conducting the regression analyses, the results are insignificant, a post hoc power analysis will be conducted in order to verify whether the non-significant results were due to insufficient power as a result of low sample size.

CHAPTER IV

RESULTS

In Chapter I, the researcher presented the study by discussing the purpose and significance of the research. Chapter II described an in depth literature review focusing on the prevalence of substance abuse in TAY, an argument for the application of the Adlerian theoretical constructs of pampering and feelings of inferiority to better understand and address substance abuse in this population, as well as a review of the observed constructs enabling, autonomy granting, parental care, parental behavioral control, self-esteem, GSE, ASE, and shame to empirically define the theoretical constructs. Chapter III outlined the methodology for the study, including the research questions, hypotheses, instrumentation utilized, data analysis procedures, and a description of the pilot study. This chapter presents the results of the analyses that were conducted to test the research questions and hypotheses. First, a description of the sample is explained using the demographic information collected in the study. Second, descriptive statistics for the instruments used in the study are outlined. Finally, a discussion of the outcomes for each research question and hypothesis is presented. The chapter concludes with a summary of the findings.

Description of Participants and Representativeness of the Sample

Among the participants eligible for the study from the sampled classrooms, a total of 214 survey packets were returned, four (1.9%) of which were not completed, leaving a

total of 210 utilized surveys in the study. The age of participants in the sample ranged from 18 (n = 17, 8.1%) to 25 (n = 3, 1.4%), with an average age of 20.7 (SD = 1.58). A total of 109 (52.7%) students reported being above the legal drinking age (ages 21-25), 47.3% of participants (n = 98) reported being under the legal drinking age (ages 18-20), and three participants (1.4%) did not indicate an age, resulting in missing data for that item. A majority of the sample was female (n = 151, 71.9%) as opposed to male (n = 56, 26.7%), with three participants (1.4%) not indicating gender. Ninety-two participants (43.8%) from the sample identified as White, 77 (36.7%) identified as Black, 16 (7.6%) Multiracial, 10 (4.8%) as Asian, 9 (4.3%) identified as Hispanic, 5 (2.4%) as "Other", and 1 (.5%) did not report on Race/Ethnicity. Approximately one third of the sample (n = 67, 31.9) reported being in their third year of their undergraduate program, followed by 28.1% (n = 59) in their second year, 21.9% (n = 46) in their fourth year, 10.5% (n = 22) in their first year, 5.7% (n = 12) in their fifth-year, and 1.9% (n = 4) reporting "other." Slightly less than half (n = 96, 45.7%) of participants indicated residing off campus, while 38.1% (n = 80) reported living in on-campus residence halls. Additionally, 1.9% (n = 4) reported living on campus in a learning community and in Greek housing. Nineteen participants (9%) reported currently residing at home with parents, 5 participants (2.4%) identified "other" residence, and 2 participants (1%) did not specify a residence. When asked to indicate the number of caregivers present in the home throughout the majority of their childhood, 147 participants (70%) indicated 2 caregivers were present, 42 participants (20%) indicated only 1 care giver was present, 9 participants (4.3%) reported 3 caregivers were present, 6 participants (2.9%) identified

having 4 caregivers present, 4 participants (1.9%) denied any caregivers were present, 1 participant (.5%) identified 5 caregivers present, and 1 participant (.5%) did not respond to the item. Of the caregivers present, a majority of participants (n = 175, 83.3%) identified their mother as the primary caregiver, with father being the next most frequently identified primary caregiver (n = 16, 7.6%). In addition to mother and father, 6 participants (2.9%) identified their grandmother as the primary caregiver, 1 participant (.5%) indicated grandfather as the primary caregiver, and 11 participants (5.2%) chose not to identify a primary caregiver.

Female participants in the study (71.9%) were slightly overrepresented compared to information collected in regards to the University in which data was collected (65%). Participants in the sample who identified as White (43.8%) were underrepresented when compared to the ratio of White undergraduate students at the University (57%); whereas, participants who identified as Black or African-American (36.7%) were slightly overrepresented (25.2%). The ratio of Hispanic (4.3%), Asian (4.8%), and Biracial/Multiracial (7.6%) participants was comparable to the overall University statistics (6.2%, 4.3%, and 4%, respectively). The average age of participants in the study was 20.7 (SD = 1.58), which was significantly lower than the reported average age of 23 by the University, despite the age restrictions required in the study.

Participants were also asked a variety of questions related to their overall experiences with alcohol and drugs. Twenty-eight participants (13.3%) reported never having taken a drink of alcohol (beyond just one sip) and 1 participant (.5%) did not identify the age of first drink. A majority of participants indicated having a first drink of

alcohol between the ages of 16 and 23 (n_{total} = 147, 70.3%; n_{16} = 31, 14.8%; n_{17} = 28, 13.3%; n_{18} = 18, 21%; n_{19} = 17, 8.1%; n_{20} = 5, 2.4%; n_{21} = 20, 9.5%; n_{22} = 1, .5%; n_{23} = 1, .5%), and the remainder of participants (n = 34, 16.3%) reported their first drink between ages 10 and 15 (n_{10} = 1, .5%; n_{11} = 1, .5%; n_{12} = 3, 1.4%; n_{13} = 6, 2.9%; n_{14} = 6, 2.9%; n_{15} = 17, 8.1%). In relation to age of first drug use, over two thirds of participants (n = 129, 61.4) denied ever taking drugs. The age of first drug use for the remainder of participants ranged from 12 to 20 (n_{12} = 2, 1%; n_{13} = 4, 1.9%; n_{14} = 2, 1%; n_{15} = 7, 3.3%; n_{16} = 19, 9%; n_{17} = 15, 7.1%; n_{18} = 17, 8.1%; n_{19} = 8, 3.8%; n_{20} = 7, 3.3%). Most participants (n = 189, 90%) reported they have peers who use alcohol or drugs, and slightly more than half (n = 110, 52.4%) indicated a family history of drug or alcohol abuse. Finally, 206 participants (98.1%) denied any history of treatment services addressing any concerns related to drug or alcohol use. All participants responded to items concerning peer use, family history of, and treatment for use of drugs and alcohol.

Descriptive Statistics of the Utilized Instrumentation

The measures used in the study included the Lynch Enabling Survey for Parents (LESP; Lynch, et al., 2002), 10 items from the Parent Behavior Measure (PBM; Bush et al., 2002), the Parental Bonding Instrument (PBI; Parker et al., 1979), the Psychological Control Scale—Youth Self-Report (PCS-YSR; Barber, 1996), the Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965), the New General Self-Efficacy Scale (NGSE; Chen et al., 2001), the 12-item version of the Alcohol Abstinence Self-Efficacy Scale (AASE; McKiernan et al., 2011), the Internalized Shame Scale (ISS; Cook, 1989), the Alcohol Use Disorder Identification Test (AUDIT; Babor et al, 2001), and the Drug Abuse

Screening Test (DAST; Skinner, 1982). The PBI and AASE both consist of two subscales. The PBI measures parental care and parental behavioral control, and the AASE assesses confidence and temptation to use. Both scales of the PBI were utilized to measure separate constructs in the study, thus descriptive statistics and reliability estimates for each scale are reported. Although the AASE was used to measure a single construct (ASE), descriptive stastistics and reliability estimates for both scales are reported, as total scores for ASE are calculated by subtracting the total temptation score from the total confidence score (Mckiernan et al., 2011). The ISS is also comprised of two scales assessing shame and self-esteem; however, only the shame scale was utilized in this study. The complete survey packet, which includes all measures and demographic items, can be found in Appendix F.

Means and standard deviations were calculated for the sample. Table 1 provides a summary of descriptive statistics, including possible and observed range for items on the scale, for each scale and subscale utilized in the sample.

Table 1

Descriptive Statistics and Reliability Estimates

Instruments and Subscales	*M (SD)*	Possible/Observed Range	Number of Items	Alpha Coefficient
LESP	88.88 (12.01)	1-4	40	0.64
PBM	34.46 (5.78)	1-4	10	0.93
PBI--Care	30.38 (5.96)	0-3	12	0.87
PBI--Control	14.22 (7.43)	0-3	13	0.86
PCS-YSR	11.35 (3.25)	1-3	8	0.82
RSES	32.26 (5.39)	1-4	10	0.89
NGSE	34.66 (4.44)	1-5	8	0.92
AASE--Temptation	12.10 (4.72)	1-5	6	0.82
AASE--Confidence	24.6 (4.98)	1-5	6	0.87
ISS	29.49 (20.02)	0-4	24	0.96
AUDIT	4.59 (4.60)	0-4	10	0.8
DAST	1.71 (2.69)	0-1	28	0.83

Note. LESP = Lynch Enabling Survey for Parents; PBM = Parent Behavior Measure; PBI—Care = Parental Bonding Instrument, care scale; PBI—Control = Parental Bonding Instrument, control scale, PCS-YSR = Psychological Control Scale—Youth Self-Report; RSES = Rosenberg Self-Esteem Scale; NGSE = New General Self-Efficacy Scale; AASE—Temptation = Alcohol Abstinence Self-Efficacy Scale, temptation scale; AASE—Confidence = Alcohol Abstinence Self-Efficacy Scale, confidence scale; ISS = Internalized Shame Scale; AUDIT = Alcohol Use Disorders Identification Test; DAST = Drug Abuse Screening Test.

Reliability Statistics for the Utilized Instrumentation

The internal consistency of each instrument used in the study was examined in order to assess the reliability of the instruments with the utilized sample. The items from the PBM assessing autonomy granting, the NGSE, and the ISS demonstrated excellent internal consistency. Furthermore, several instruments yielded good reliability, including the care and behavioral control scales of the PBI, the PCS-YSR, the RSES, both scales (temptation and confidence) on the AASE, the AUDIT, and the DAST. Examination of the reliability estimates for the total AASE scale revealed low internal consistency (α = .014), which was expected as the two scales measure opposing constructs. Reliability of

the LESP was of particular interest due to the alteration of items to reflect child perspective of parental enabling rather than parent perspective. Reliability for the LESP in the utilized sample was did not reach adequate levels of reliability (α = .64). Although consistent with reports from researchers who have utilized the LESP with children rather than parents (Lynch et al., 2002), this is considered a limitation of the current study.

Assessing Normality of the Variables in the Research Sample

Assumptions of normality were assessed using skewness and kurtosis statistics. Statistics for psychological control, self-esteem, GSE, ASE, and shame were all within the acceptable range of $\leq$ +/-1. On the other hand, enabling, autonomy granting, parental care, parental behavioral control, alcohol abuse, and drug abuse all demonstrated a leptokurtic distribution. Furthermore, parental care, alcohol abuse, and drug abuse are all positively skewed, with most scores concentrated to the left of the mean, whereas, autonomy granting and parental behavioral control are negatively skewed with a majority of scores clustered to the right of the mean (see Table 2).

Table 2

Skewness and Kurtosis Statistics for Instruments and Subscales

Instruments and Subscales	*n*	Skewness Statistic	Kurtosis Statistic
LESP	188	0.883	2.274
PBM	209	-1.374	2.535
PBI--Care	209	1.472	2.468
PBI--Control	208	-1.625	2.750
PCS-YSR	210	0.490	-0.191
RSES	206	-0.313	-0.656
NGSE	209	-0.546	-0.034
AASE--Temptation	209	0.631	-0.236
AASE--Confidence	210	-0.962	0.743
ISS	200	0.608	-0.464
AUDIT	200	1.512	3.692
DAST	207	3.686	18.922

Note. LESP = Lynch Enabling Survey for Parents; PBM = Parent Behavior Measure; PBI—Care = Parental Bonding Instrument, care scale; PBI—Control = Parental Bonding Instrument, control scale, PCS-YSR = Psychological Control Scale—Youth Self-Report; RSES = Rosenberg Self-Esteem Scale; NGSE = New General Self-Efficacy Scale; AASE—Temptation = Alcohol Abstinence Self-Efficacy Scale, temptation scale; AASE—Confidence = Alcohol Abstinence Self-Efficacy Scale, confidence scale; ISS = Internalized Shame Scale; AUDIT = Alcohol Use Disorders Identification Test; DAST = Drug Abuse Screening Test.

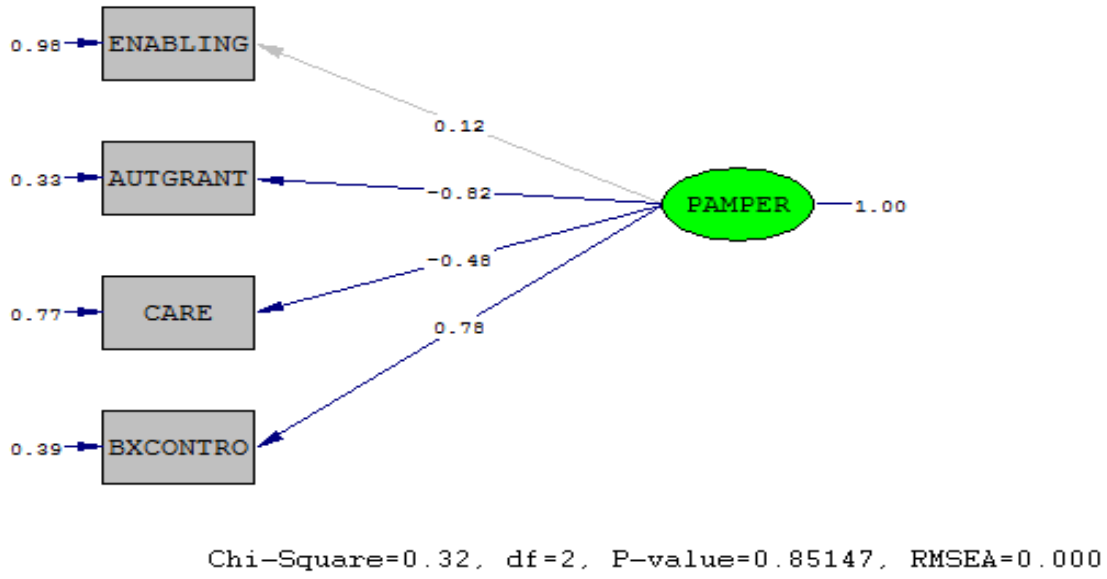
Results of Hypothesis Testing

The purpose of the following section is to examine the results of the hypothesis tests that were performed in the study. The following analyses were used to test the four hypotheses: structural equation modeling (SEM), including confirmatory factor analysis (CFA) and path analysis, and a Sobel test for mediation.

Hypothesis One: Examination of the Latent Construct, Pampering

The first hypothesis stated that the observed constructs of enabling, autonomy granting, parental care, and parental behavioral control would adequately define the latent

construct of pampering. In order to test the hypothesis that the indicators of enabling, autonomy granting, parental care and parental behavioral control measure the factor of pampering, a CFA was performed. Data for each of the endogenous variables was entered in SPSS Statistics v20, and a covariance matrix was developed using the correlations and standard deviations between the variables. The covariance matrix and the model specifications were entered into LISREL Version 8.8 Student Edition in order to develop the hypothesized CFA model. The model with the standardized factor loadings is presented in Figure 2.



ENABLING = Enabling; AUTGRANT = Autonomy Granting; CARE = Parental Care; BXCONTROL = Parental Behavioral Control; PAMPER = Pampering

Figure 2. Standardized Solution of Pampering CFA ($N = 210$)

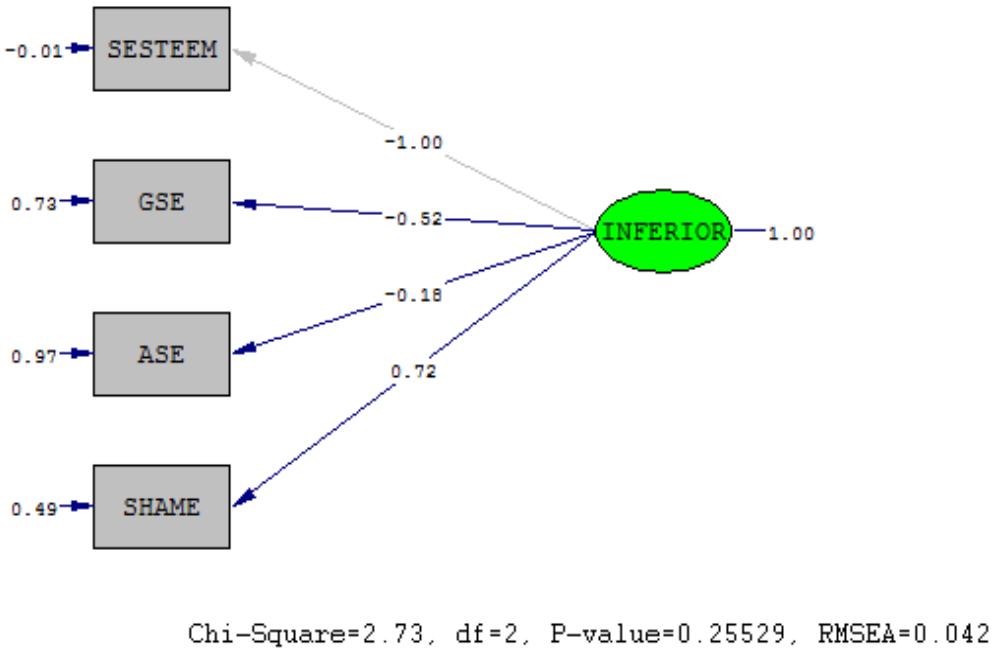
Examination of the factor loadings presented in Table 3 for the CFA suggest that autonomy granting and parental behavioral control may explain the latent construct,

pampering, as factor loadings > .70 suggest convergent validity of the indicators in relation to the factor (Kline, 2011). Additionally, results of the measurement error for enabling (.98) and parental care (.77) indicate that more than 50% of the variance between these endogenous variables and the exogenous variable may be accounted for by other factors (Kline, 2011).

Evaluation of the global fit statistics revealed positive results in regards to the approximate fit of the model for the data. Results from the Chi-square analysis (χ^2 = .322, *df* = 2, *p* = 0.85), which is not statistically significant, indicating good model fit. Root mean square error of approximation (RMSEA) was also examined, yielding a result of 0, which is less than the desired RMSEA ≤ .05, and suggests excellent fit for the data. Additionally, the comparative fit index (CFI) revealed a result of 1, also indicating excellent fit for the data as it is above the desired threshold for reasonable fit (CFI ≥ .90). Finally, the standardized root mean square residual (SRMR) was below the desired SRMR ≤ .10, with a value of 0.01, also indicating excellent fit for the data. Results of the goodness of fit indices are presented in Table 4.

Hypothesis Two: Examination of the Latent Construct, Inferiority Feelings

Hypothesis two addressed the empirical definition of the latent construct, inferiority feelings using the manifest constructs of self-esteem, GSE, ASE, and shame. Similar to hypothesis one, hypothesis two was assessed using a CFA. Using the covariance matrix created for the data, a CFA was run to examine whether the endogenous variables were caused by the exogenous variable, inferiority feelings. The CFA model with the standardized factor loadings is presented below in Figure 3.



SESTEEM = Self-esteem; GSE = General Self-efficacy; ASE = Abstinence Self-efficacy; SHAME = Shame; INFERIOR = Inferiority Feelings

Figure 3. Standardized Solution for Inferiority Feelings CFA ($N = 210$)

The factor loadings for the standardized solution (see Table 3) in the CFA suggest self-esteem (-1.00) and shame (.72) may explain the latent construct inferiority feelings; however, because factor loadings for GSE and ASE are below the desired ≥ .70 (-.52 and -.18, respectively), and the measurement errors are above the desired ≤ .50 (.72 and .97, respectively), more than half of the variance for each of these variables is explained by other factors or measurement error (Kline, 2011). Further, the negative residual on the self-esteem construct (-.01) suggests that more than 100% of the variance is explained by the variable. This finding is considered a major limitation of the model and may be due to insufficient sample size or gross model mis-specification (Gagne & Hancock, 2006).

Global fit statistics were evaluated to determine appropriateness of fit of the model for the data. Chi-square analysis ($\chi^2 = 2.731$, $df = 2$, $p = 0.2553$) indicated a good fit of the model for the data. Consistent with Chi-square results, examination of RMSEA revealed results below the desired threshold for good fit ($0.0417 \leq .05$). Additionally, SRMR and CFI results both demonstrated excellent fit for the model.

SRMR results (0.03) were below the desired .10, and the CFI = 0.996, which was above the ≥ .90 rule (Kline, 2011). Results of each of the global statistics suggest the model is an excellent fit for the data (see Table 4).

Table 3

CFA Factor Loadings

	Unst.	***SE***	***St.***
Pampering			
ENABLING	1.00	--	0.12
AUTGRANT	-3.16	1.96	-0.82
CARE	-1.92	1.21	-0.48
BXCONTROL	3.88	2.40	0.78
Inferiority Feelings			
SESTEEM	-1.00	--	-1.00
GSE	-0.43	0.07	-0.52
ASE	-0.29	0.12	-0.18
SHAME	2.65	0.33	0.72

Note. Enabling = Enabling; AUTGRANT = Autonomy Granting; CARE = Parental Care; BXCONTROL = Parental Behavioral Control; SESTEEM = Self-esteem; GSE = General Self-efficacy; ASE = Abstinence Self-efficacy; SHAME = Shame

Table 4

Goodness of Fit Indices for CFA and Structural Regression Model

Hypothesized Model	χ^2	*df*	*p* value	RMSEA	SRMR	CFI
Pampering CFA	0.322	2	0.8515	0.0	0.00982	1.0
Inferiority CFA	2.731	2	0.2553	0.0417	0.0282	0.996
Full Alcohol Model	247.399	32	0.00	0.179	0.155	0.677
Full Drug Model	206.542	32	0.00	0.161	0.146	0.721
Pampering/Alcohol Model	9.094	5	0.1054	0.0624	0.052	0.973
Pampering/Drug Model	2.877	5	0.719	0.0	0.0265	1.0
Inferiority/Alcohol Model	83.910	5	0.00	0.274	0.145	0.703
Inferiority/Drug Model	47.506	5	0.00	0.201	0.113	0.818

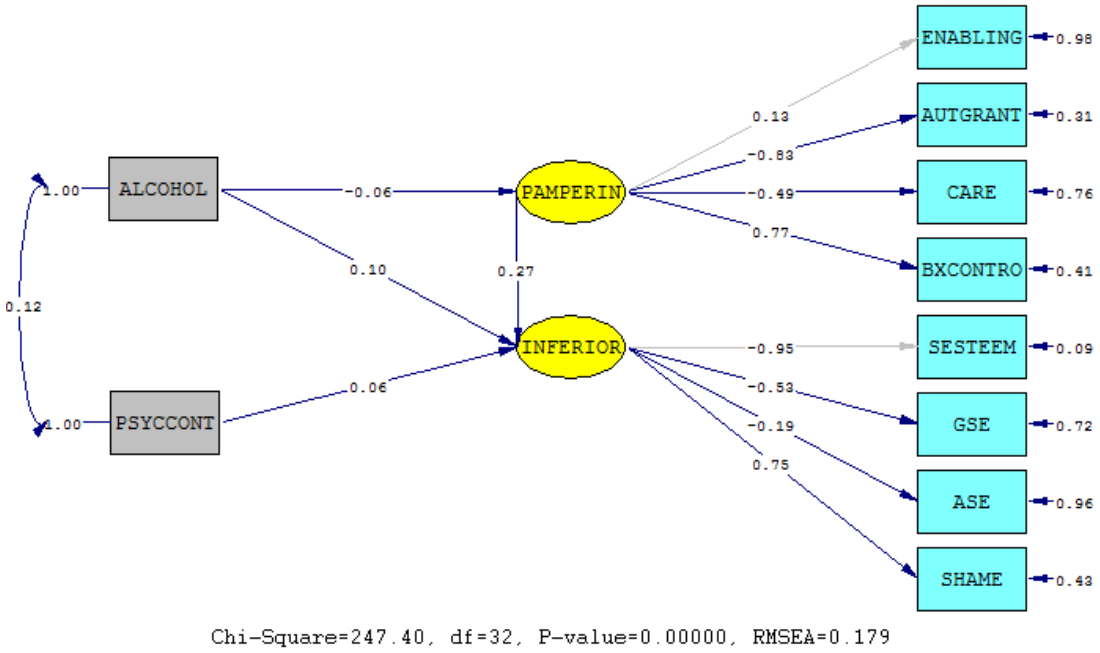
Note. RMSEA = Root mean square error of approximation; SRMR = Standardized root mean square residual; CFI = Comparative Fit Index.

Hypothesis Three: Model Fit

Assumptions regarding the direct effects between the endogenous and exogenous variables using the proposed model were discussed in hypothesis three. The CFAs for both pampering and inferiority demonstrated excellent fit for the data, providing evidence for the use of the latent constructs in the proposed model. For this reason, structural regression models were used to examine the relationships between the variables, as this type of analysis allows for the inclusion of latent variables (Kline, 2011). Two separate structural regression models were assessed, one examining the relationship between the endogenous variables and alcohol abuse, the other evaluating their relationship to drug abuse (see Figures 4 and 5 below).

Pearson product moment correlations and standard deviations of the endogenous and exogenous variables were used to create a covariance matrix that was input into

LISREL in order to generate the hypothesized models using structural equation modeling (SEM). The specified model with standardized path coefficients for the alcohol model is presented in Figure 4 and the unstandardized and standardized estimates for the model paths are presented in Table 5.



ALCOHOL = Alcohol Abuse; PSYCCONT = Parental Psychological Control; PAMPERIN = Pampering; INFERIOR = Inferiority; ENABLING = Enabling; AUTGRANT = Autonomy Granting; CARE = Parental Care; BXCONTRO = Parental Behavioral Control; SESTEEM = Self-esteem; GSE = General Self-efficacy; ASE = Abstinence Self- efficacy; SHAME = Shame.

Figure 4. Standardized Solution for Hypothesized Alcohol Model ($N = 210$)

Global fit statistics were evaluated to examine the overall model fit, with results suggesting the model is a poor fit for the data (see Table 4). Analysis of the Chi-square fit statistic demonstrated statistically significant results ($\chi^2 = 247.399$, $df = 32$, $p < .01$), indicating a rejection of model fit. Additionally, RMSEA (0.179) was above the desired $\leq .08$ threshold, also suggesting poor fit for the data. Evaluation of the CFI was

consistent with these results, with a value of 0.677, which is less than the ≥ .90 rule. Finally, SRMR was equal to 0.155, which is above the necessary ≤ .10 for good model fit, further confirming the model being a poor fit for the data (Kline, 2011). Hypotheses related to the direct effects between variables were not supported in the model. The model was not interpreted due to lack of good fit.

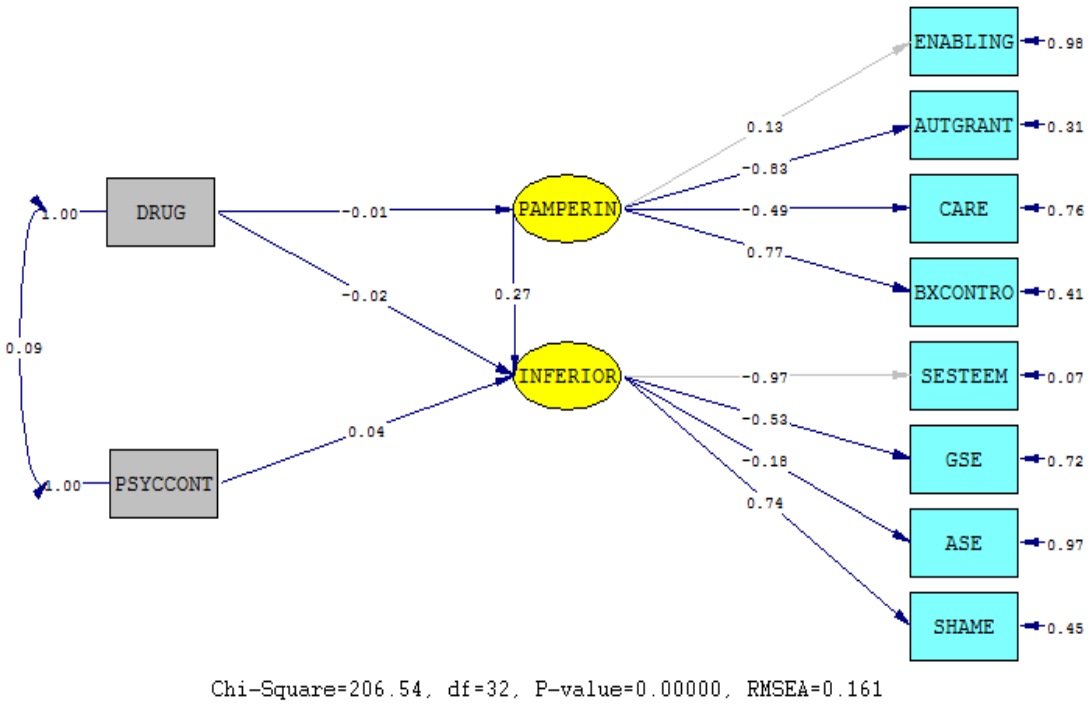
Table 5

Unstandardized and Standardized Path Estimates

	Unst.	***SE***	***St.***
Full Alcohol Model			
PAMPERING → INFERIORITY	0.91	0.61	0.27
PAMPERING → ALCOHOL	-0.02	0.03	-0.06
PSYCCONTROL → INFERIORITY	0.09	0.11	0.06
INFERIORITY → ALCOHOL	0.10	0.08	0.10
Full Drug Model			
PAMPERING → INFERIORITY	0.90	0.58	0.27
PAMPERING → DRUG	-0.01	0.05	-0.01
PSYCCONTROL → INFERIORITY	0.06	0.11	0.04
INFERIORITY → DRUG	-0.04	0.14	-0.02
Pampering Alcohol Model			
PAMPERING → ALCOHOL	-0.02	0.03	-0.06
Pampering Drug Model			
PAMPERING → DRUG	-0.01	0.04	-0.01
Inferiority Alcohol Model			
INFERIORITY → ALCOHOL	0.08	0.08	0.07
Inferiority Drug Model			
INFERIORITY → DRUG	-0.07	0.14	-0.03

Note. PAMPERING = Pampering; INFERIORITY = Inferiority Feelings; PSYCCONTROL = Parental Psychological Control; ALCOHOL = Alcohol Abuse; DRUG = Drug Abuse

The researcher replicated the procedures used for the alcohol structural regression model to generate a similar model using drug abuse results. Figure 5 represents the standardized solution for the hypothesized drug abuse model.



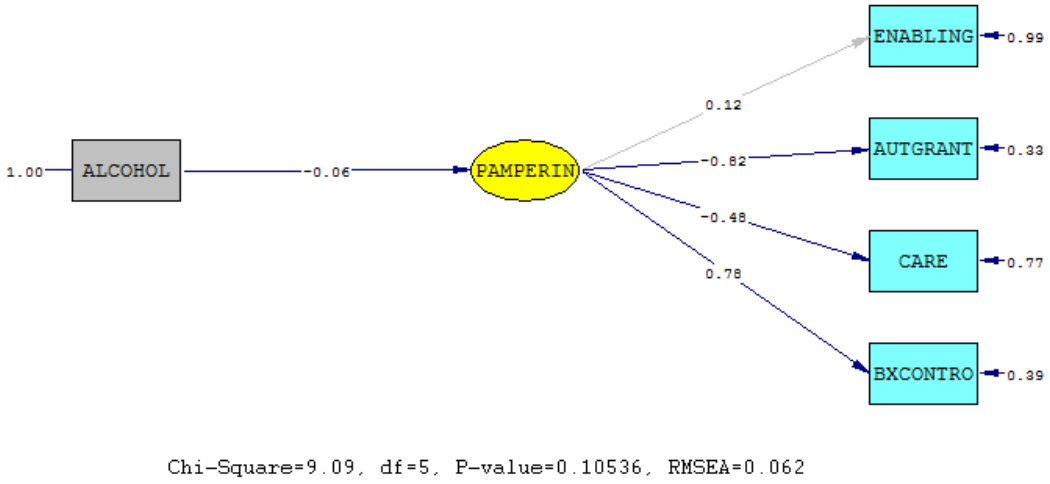
DRUG = Drug Abuse; PSYCCONT = Parental Psychological Control; PAMPERIN = Pampering; INFERIOR = Inferiority; ENABLING = Enabling; AUTGRANT = Autonomy Granting; CARE = Parental Care; BXCONTRO = Parental Behavioral Control; SESTEEM = Self-esteem; GSE = General Self-efficacy; ASE = Abstinence Self- efficacy; SHAME = Shame.

Figure 5. Standardized Solution for Hypothesized Drug Model ($N = 210$).

Evaluation of the global fit statistics, presented in Table 4, suggest the hypothesized model for drug abuse is also a poor fit for the data. Results of the Chi-square analysis ($\chi^2 = 206.542$, $df = 32$, $p < .01$) were statistically significant, suggesting poor fit for the model. Similarly, RMSEA indicated poor fit with a value of 0.161, which

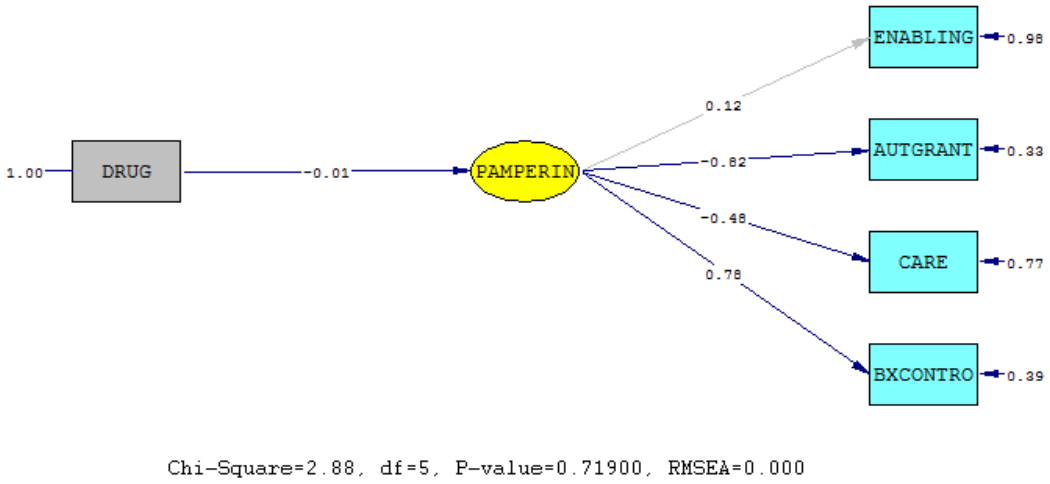
is greater than ≤ .05. Analysis of SRMR (0.146) and CFI (0.721) revealed similar results with values outside the respective thresholds (SRMR ≤ .10 and CFI ≥ .90; Kline, 2011). Hypotheses regarding direct relationships between the endogenous variables and drug abuse were not supported in the model, thus the model was not interpreted. In order to check for parsimony in the models, both hypothesized models were run excluding the constructs that had low factor loadings on the latent variables (enabling, parental care, GSE, and ASE). Exclusion of these variables did not impact the fit of either model.

In response to the poor fit of both hypothesized models, the relationship between each of the latent variables (pampering and inferiority) and the exogenous variables (alcohol abuse and drug abuse) were examined independently to test for improved model fit (see Figures 6-9).



Note. ALCOHOL = Alcohol Abuse; PAMPERIN = Pampering; ENABLING = Enabling; AUTGRANT = Autonomy Granting; CARE = Parental Care; BXCONTRO = Parental Behavioral Control

Figure 6. Standardized Solution for the Hypothesized Model of the Relationship Between Pampering and Alcohol Abuse



Note. DRUG = Drug Abuse; PAMPERIN = Pampering; ENABLING = Enabling; AUTGRANT = Autonomy Granting; CARE = Parental Care; BXCONTRO = Parental Behavioral Control

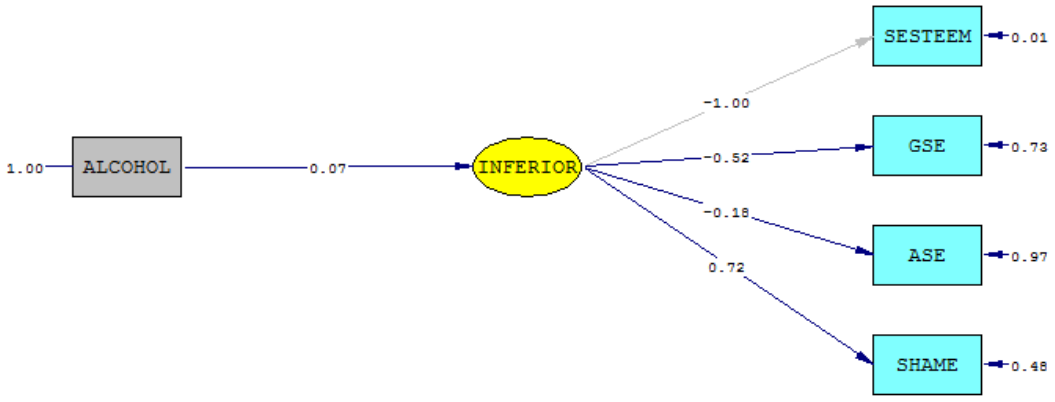
Figure 7. Standardized Solution for the Hypothesized Model of the Relationship Between Pampering and Drug Abuse

Global fit statistics for the hypothesized models of the relationship between pampering and substance abuse revealed that both models (alcohol abuse and drug abuse) were a good fit for the data (see Table 4). More specifically, neither Chi-square analysis was statistically significant ($\chi^2 = 9.094$, $df = 5$, $p = 0.1054$; $\chi^2 = 2.877$, $df = 5$, $p = 0.719$, respectively), suggesting good model fit. Additional global fit statistics were consulted, including RMSEA, SRMR, and CFI. RMSEA for the alcohol model was 0.0624, which is slightly above the desired threshold ($\leq .05$), suggesting marginal model fit; however, the drug model revealed an RMSEA of 0.0, which is below the desired threshold and suggests good model fit. The SRMR statistic for the alcohol model was 0.052 and the SRMR statistic for the drug model was 0.0265, both of which indicate a good fit for the data as they are below .10. Finally, results of the CFI statistics for both models were above .90 (0.973; 1.0, respectively), suggesting good fit for the data. Although the

RMSEA was slightly above the desired threshold for the hypothesized model of the relationship between pampering and alcohol, examination of the other goodness of fit indices suggests that this model is a satisfactory fit for the data (Kline, 2011).

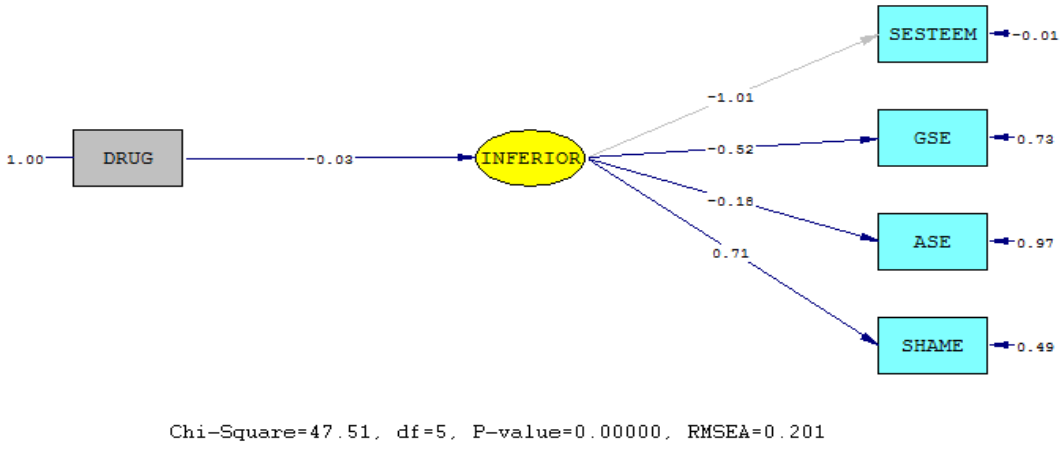
In hypothesis 3b, a positive and significant relationship was proposed to exist between parental pampering and alcohol abuse. This hypothesis was not supported in the model (g = -0.06, t = -0.70, p > .05), as the negative relationship between parental pampering and alcohol abuse was not significant (see Table 5 and Figure 6). Hypothesis 3c predicted a positive and significant relationship between parental pampering and drug abuse. Similar to results for hypothesis 3b, examination of the structural model indicated a non-significant negative relationship between parental pampering and drug abuse (g = -0.01, t = -0.12, p > .05), refuting the hypothesis (see Table 5 and Figure 7).

In addition to performing analyses on the relationship between pampering and substance abuse, SEM analyses were conducted to assess relationships between inferiority, alcohol abuse, and drug abuse. Results of the analyses are presented in Table 5 and Figures 8 and 9.



Note. ALCOHOL = Alcohol Abuse; INFERIOR = Inferiority Feelings; SESTEEM = Self-esteem; GSE = General Self-efficacy; ASE = Abstinence Self-efficacy; SHAME = Shame

Figure 8. Standardized Solution for the Hypothesized Model of the Relationship Between Inferiority and Alcohol Abuse



Note. DRUG = Drug Abuse; INFERIOR = Inferiority Feelings; SESTEEM = Self-esteem; GSE = General Self-efficacy; ASE = Abstinence Self-efficacy; SHAME = Shame

Figure 9. Standardized Solution for the Hypothesized Model of the Relationship Between Inferiority and Drug Abuse

Analysis of the global fit statistics for the hypothesized models of the relationship between inferiority feelings and substance abuse revealed both models (alcohol and drug)

demonstrate poor fit for the data. Results of the Chi-square analyses were $\chi^2 = 83.910$, $df = 5$, $p < .01$ for the alcohol model and $\chi^2 = 47.506$, $df = 5$, $p < .01$ for the drug model. These results are statistically significant, suggesting poor fit for both models. Additionally, RMSEA statistics were 0.274 for the alcohol model and 0.201 for the drug model, both of which are below the desired threshold (≤ .05). Analysis of the SRMR statistics (0.145 for the alcohol model and 0.113 for the drug model) indicates poor fit for the data as they are both less than .10. Finally, the CFI statistics further confirmed rejection of the models with results of 0.703 (alcohol) and 0.818 (drug). CFI statistics require values ≥ .90 to demonstrate good fit for the data (Kline, 2011). Due to the poor fit, neither model was interpreted.

Hypothesis Four: Test for Mediation

Hypothesis four assumes inferiority feelings will partially mediate the relationship between pampering and alcohol abuse, and pampering and drug abuse. In order to test this hypothesis, a Sobel test for mediation was conducted. Examination of the t value for the effect of pampering on inferiority ($t = -1.618$, $p > .05$) and inferiority on alcohol abuse ($t = -1.737$, $p > .05$) reveal that neither direct path is significant (Kline, 2011). Unstandardized estimates and standard error for the effect of pampering on inferiority (b = -0.122, *SE* = 0.075), and inferiority on alcohol abuse (b = -0.130, *SE* = 0.075) were entered into a Sobel test calculator (Soper, 2015) to determine the significance of the indirect effects. Results of the Sobel test revealed the indirect effect of inferiority on the relationship between pampering and alcohol abuse was not significant ($t = 1.186$, $p = 0.24$).

Similarly, direct effects of pampering on inferiority and inferiority on drug abuse were analyzed for statistical significance. The t-value for the direct path between pampering and inferiority (t = -1.646, p > .05) and inferiority and drug abuse (t = -0.109, p > .05) indicate non-significant results. To test for significant indirect effects, a Sobel test for mediation was employed using the unstandardized estimates and standard errors for the direct effects of pampering on inferiority (b = -0.118, SE = 0.072) and inferiority on drug abuse (b = -0.014, SE = 0.130; Kline, 2011). The results of the Sobel test were not significant (t = 0.107, p = .91), suggesting inferiority does not partially mediate the relationship between pampering and drug abuse.

Hypothesis Five: Group Differences

Hypothesis five related to potential differences in the identified model between individuals who reported a history of treatment for substance abuse and individuals who did not. Hypothesis five was not tested due to a small sample size (n = 4) of those participants who received substance abuse treatment.

Summary of Results

The purpose of this chapter was the present results from analyses performed to test the five research questions and hypotheses outlined in Chapter I. The first hypothesis proposed that the manifest variables of enabling, autonomy granting, parental care, and parental behavioral control would adequately define the latent construct, parental pampering. Confirmatory Factor Analysis (CFA) was performed to test this hypothesis, revealing that high factor loadings on the indicators of autonomy granting and parental behavioral control suggest they explain the latent construct, pampering. Examination of

global fit statistics demonstrated the model was good fit for the data, supporting hypothesis one. Similarly, hypothesis two suggested the exogenous variable, inferiority feelings, may be adequately defined using the endogenous variables of self-esteem, general self-efficacy (GSE), abstinence self-efficacy (ASE), and shame. Examination of the CFA supported hypothesis two, with global fit statistics demonstrating the model was good fit for the data. Following confirmation of the model fit for the latent structures, hypotheses were proposed examining relationships amongst the variables.

In hypothesis three, assumptions regarding the relationships between the variables presented in the model were outlined. More specifically, a positive and significant relationship was proposed to exist between perceptions of parental pampering and inferiority feelings, perceptions of parental pampering and alcohol abuse, perceptions of parental pampering and drug abuse, perceptions of parental psychological control and inferiority feelings, inferiority feelings and alcohol abuse, and inferiority feelings and drug abuse. Examination of the overall model fit for the relationships amongst the variables and alcohol abuse revealed the model was a poor fit for the data. Similarly, analysis of the relationships between the variables and drug abuse demonstrated similar poor fit for the data. In response to these results, the latent constructs, pampering and inferiority, were analyzed in relationship to alcohol abuse and drug abuse to determine if relationships between each of the latent constructs and substance abuse exist independently. Results of these analyses revealed good model fit for the relationship between pampering and alcohol abuse and pampering and drug abuse, but not between inferiority feelings and either substance.

In addition to assumptions related to direct effects between variables, hypothesis four proposed that inferiority feelings would partially mediate the relationship between perceptions of parental pampering and alcohol abuse, as well as between perceptions of parental pampering and drug abuse. A Sobel test for mediation was performed and results did not provide support for hypothesis four. Lastly, in hypothesis five, differences in the strength of relationships within the model were proposed to exist between individuals who had a history of treatment for substance abuse and those who did not. Hypothesis five was not examined in the current study due to inadequate power due to low sample size of individuals who reported a history of treatment ($n = 4$). In the final chapter, the results presented in Chapter 4 will be discussed as they relate to previous research findings. Limitations of the current study will also be addressed, as will implications for future research and practice.

CHAPTER V

DISCUSSION

The results of the hypothesis tests conducted to analyze the five research questions presented in the study were outlined in Chapter IV. The current chapter will provide a detailed discussion of the reported results. Implications related to the sample utilized in the study and reliability estimates for the instrumentation will be highlighted. Furthermore, a discussion of the results of each hypothesis will be presented, highlighting the influence of empirically defining pampering and inferiority feelings and the relationships between those constructs and substance abuse. Limitations in the current study also will be examined in the chapter. Finally, an exploration of the theoretical and practical implications the results of the study hold for future research and practice will be examined.

Participants' Substance Use

The sample of participants utilized in the study consisted of students between the ages of 18 and 25 at a mid-sized university in the Southeast. Examination of the total scores for alcohol use in the sample revealed that approximately 76% reported use of any amount of alcohol, whereas 21% of those individuals reported alcohol use above the clinical cutoff for alcohol abuse or dependence (≥ 8; Babor et al., 2001). Although report of any use of alcohol in the sample was slightly below other reported findings, with national estimates of 80% of college students reported use of alcohol, clinically

significant use was slightly above national reports (19%; National Institute on Alcohol Abuse and Alcoholism (NIAAA), 2013), suggesting that alcohol use in the current sample may be representative of the larger college population. Findings from the current study demonstrate that clinically significant use of alcohol is prevalent in college students and there is a need to better understand potential impacting factors on substance abuse in this population so more effective treatment and intervention services can be implemented in this age group.

National statistics reveal that of the 19% of individuals reporting clinically significant alcohol use, only 5% report having sought treatment for their drinking (NIAAA, 2013). In the current sample, 9% of individuals who met criteria for an alcohol use disorder identified a history of treatment for their use. Although higher than findings reported by the NIAAA (2013), the low rates of treatment in individuals indicating clinically significant substance abuse provides evidence for the need to more effectively engage college students between the ages of 18 and 25 in treatment.

Additionally, 64% of students in the current sample stated use of illicit substances within the past year, including identifying consequences related to their use, such as feelings of guilt, conflict in relationships, and legal consequences. This number is significantly higher than 22.3% of individuals in a similar population who reported illicit use of substances in a national report (SAMHSA, 2014a). National statistics reveal reports of current illicit drug use, whereas the sample utilized in this study was asked to report on use within the past year, which may have influenced the high percentage of reported drug use. Even if reporting across a year, the percentage in the current sample is

still three times that of the national statistics for current use. Of those reporting illicit drug use in the past year in the current sample, 7% met criteria for a clinical diagnosis of drug abuse or dependence, with scores ≥ 8 (Skinner, 1982). Additionally, out of the 7% who met criteria for a clinical diagnosis in the current sample, only 2.6% also reported a history of substance abuse treatment; however, participants were not asked whether the history of treatment was due to alcohol use or drug use, thus the exact number of individuals seeking treatment for drug use versus alcohol use is unknown.

While it is unknown why the 91% of students reporting clinically significant alcohol use and the 71% of students who reported meeting criteria for drug abuse or dependence in the current sample were not in treatment, this is similar to what we know nationally. Rates of substance abuse treatment are consistently found to be lower in individuals aged 18-19 (SAMHSA, 2014b), and a range of treatment barriers have been identified as potentially impacting this trend (Davis & Vander Stoep, 1997). On the one hand, students may not be seeking services due to institutional mistrust, inadequate service expertise, inadequate continuity of care, and age-inappropriate services may influence the lack of representation of this age group in treatment (Davis, 2003; Manteuffel et al., 2008; Wilens & Rosenbaum, 2013), while on the other hand, the freedom and independence that characterize TAY, and the perceived normality of drinking in college, may skew the perception of drinking behaviors as "normal," rather than problematic (Arnett, 2005). Additionally, individuals in this age range may experience fewer consequences than those who have been using substances long-term. Many individuals seek treatment when they have experienced significant consequences or

report “hitting rock bottom” and the decreased incidence of consequences in the TAY population could play a role in the reported lack of services they receive. Regardless of the cause behind the lack of treatment received by this population, researchers agree that the current rate of alcohol use on college campuses is problematic. This trend is highlighted in the current sample as only 4 participants of the 44 who met criteria for an alcohol use disorder reported having sought treatment, despite the availability of free treatment provided on campus, and those who did report clinically significant use indicated a variety of negative consequences (e.g., medical consequences, legal consequences, interpersonal consequences). These findings are consistent with national reports that negative outcomes related to alcohol abuse range from academic problems, physical injuries, assault, sexual abuse, unsafe sex, health problems, drunk driving, legal consequences, and death (NIAAA, 2015). Further, researchers have reported intrapersonal consequences (e.g., feeling guilty, ashamed, depressed), academic concerns (e.g. missing school, not completed homework), failure to fulfill obligations (e.g., missed work, spent a significant amount of time using), legal consequences, and interpersonal problems (e.g., lost friendships, gotten into fights) as identified consequences related to drug use in a college sample (Palmer, McMahon, Moreggi, Rounsaville, & Ball, 2012).

These realities highlight the need to bridge the gap between individuals who need treatment and those who receive it in the TAY population. The discrepancy between the number of individuals reporting clinically significant alcohol use and those who have sought treatment in the current study provides a rationale for better understanding factors that potentially impact the abuse of substances. Understanding these factors can

influence the way in which treatment is provided to these individuals and consequently, could decrease the negative effects experienced by college students aged 18 to 25.

Major Findings

Given the prevalence of substance abuse in transition-aged youth (TAY), and the rates of use in college students in this age range (18-25), the purpose of this study was to explore relationships between parenting behaviors, thoughts and feelings about the self, and substance abuse, as these factors may provide a deeper understanding of the use of substances in this population. In addition, because empirical definitions of parenting behaviors that make up the construct of pampering, as well as thoughts and feelings about the self that may define inferiority feelings are lacking in current research (Kaplan, 1985; Strano & Dixon, 1990), a second aim of the study was to empirically define the theoretical constructs of pampering and inferiority feelings.

Hypothesis One: Examination of the Latent Construct, Pampering

Confirmatory factor analysis (CFA) was utilized to analyze the hypothesis that the observed constructs of enabling, autonomy granting, parental care, and parental behavioral control would adequately define the latent construct of pampering was supported. Results revealed that although autonomy granting and parental behavioral control appeared to load more strongly onto the latent construct, the overall model was a good fit for the data. Results of this study are significant in that one method of measuring the latent construct of parental pampering has been uncovered, using observed constructs that have been linked to externalizing behaviors in children. While other researchers have postulated and hypothesized what pampering entails (Adler, 2005; Kaplan, 1985), this

study has found that enabling, autonomy granting, parental care, and parental behavioral control all play a role in explaining parental pampering as originally defined by Adler.

For the most part, all hypothesized relationships were found. One particularly interesting finding related to the pampering CFA is that although the researcher postulated a positive relationship between perceptions of parental care and pampering, a negative relationship was found. Parental care relates the amount of availability and responsiveness a parent demonstrates towards a child, and is measured on a continuum from rejection to warmth (Biggam & Power, 1998; Yahav, 2006), and was assumed to relate to pampering in that parents who are overly warm may cater to a child. Results from this study reveal that, at least from the child's perspective, pampering may be more consistent with perceptions of rejection or indifference on the part of the parent. Low levels of care may be associated with pampering in that parents who pamper their children do so by catering to them and rescuing them from taking responsibility for age-appropriate tasks, and from the child's perspective, these behaviors may be viewed as coming from a place of indifference or neglect, rather than a place of warmth and care. In other words, children may view parental encouragement of taking personal responsibility as coming from a place of caring for the child and being catered to as hindering development and coming from a place of indifference.

Hypothesis Two: Examination of the Latent Construct, Inferiority Feelings

A similar CFA was conducted to test the hypothesis that the latent construct of inferiority feelings may be defined using the observed variables of self-esteem, general self-efficacy (GSE), abstinence self-efficacy (ASE), and shame. Adler theorized that

feelings of inferiority result when individuals lack a sense of competence, belongingness, and significance (Dreikurs, 1990), or in other words, when individuals are unsuccessful at achieving feelings of superiority (Mosak & Maniacci, 1999). Thus, according to theory, evaluations and feelings about the self may exist on a continuum from inferiority to superiority, and individuals may turn to substances to cope when they experience more negative evaluations about the self (inferiority; Adler, 2005; Dreikurs, 1990). However, empirically derived methods of measuring inferiority feelings have not been established through research (Strano & Dixon, 1990).

As self-esteem, GSE, and shame include beliefs about the self as worthy, perceptions of competence, and feelings of inadequacy (Judge et al., 1998; Rosenberg, 1965; Tangey & Dearing, 2002), they are hypothesized as potential definitions of inferiority feelings, which include evaluations and feelings about the self (Dreikurs, 1990). In addition, because the study included substance abuse as an outcome variable, ASE was included as belief in one's ability to maintain abstinence in high-risk situations (Burleson & Kaminer, 2005) may impact feelings of inferiority related to substance abuse. Support for these observed constructs as measurable definitions of inferiority feelings was found in the CFA, providing an argument for use of self-esteem, GSE, ASE, and shame to measure feelings of inferiority in future research. Adler wrote about inferiority as a continuum with superiority on one end and inferiority on the other. Thus, in the current study, it appears that the observed constructs measure this continuum. Given the continuum, in the current study, self-esteem, GSE, and ASE were all negatively related to the latent construct, suggesting the more self-esteem, GSE, and ASE

an individual perceives in himself, the more positive evaluations and feelings he holds about the self, or the lower the feelings of inferiority. Similarly, shame was positively related to the construct, signifying that higher levels of shame are inversely related to superiority feelings, and as a consequence, more feelings of inferiority.

Despite the overall fit of the model, only self-esteem and shame were found to load strongly onto the construct inferiority feelings; whereas GSE and ASE revealed factor loadings that suggest that more than 50% of the variance may be accounted for by other factors. Self-esteem and shame have previously been linked to substance abuse in research (Donelly et al., 2008; Tangey & Dearing, 2002); however, little research exists examining the relationship between GSE and substance abuse as GSE is a measure of overall feelings of self-efficacy. Additionally, although ASE has been associated with decreased relapse (Marlatt, 1985b) and better treatment outcomes (Diclemente et al., 1994), the relationship between ASE and substance abuse has not previously been explored in a non-clinical sample. In the current sample, mean ASE scores were high, which may be due to the low rates of individuals reporting treatment. The low rates of treatment reported in the current sample may suggest that participants may not view their substance use as problematic, thus not seeing a need to maintain abstinence. Given the overall fit of the model, further research is necessary to examine how well these variables load in other populations. These results are noteworthy, however, as each construct has been identified as having potential influence on individual outcomes, yet this is the first empirical investigation of these constructs being appropriate in measuring the latent

construct of inferiority. Overall, what was found in this study supported Adler's original theory discussing inferiority.

Hypothesis Three: Direct Effects

Once the definitions for the latent constructs of pampering and inferiority feelings were validated, SEM was utilized to analyze the model of potential relationships between the constructs (see Figure 1).

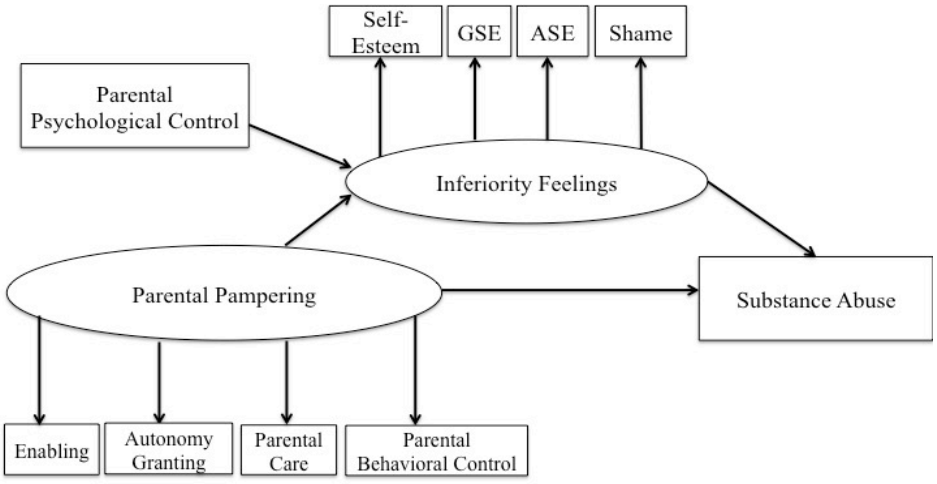


Figure 10. Proposed Model Examining Definitions of the Latent Structures (Parental Pampering and Inferiority Feelings) and Direct Relationships Between Perceptions of Parental Pampering, Perceptions of Parental Psychological Control, Inferiority Feelings, and Substance Abuse.

The proposed model was analyzed as it related to both alcohol abuse and drug abuse, with both models resulting in poor fit for the data, thus the larger model was not interpreted. However, examination of residuals and modification indices in the model

demonstrates that allowing a direct path between alcohol and ASE would allow a chi-square improvement of 64.2 on one degree of freedom. This large chi-square increase is consistent with the lower factor loading of ASE on the inferiority construct and suggests that ASE is not strongly related to the factor. Future research is necessary to explore additional constructs that may make up the latent construct of inferiority feelings and relationships that exist in the proposed model given this improved definition.

Given that theoretical connections have been discussed in relation to pampering and substance abuse, as well as inferiority feelings and substance abuse, each latent construct was analyzed independently to test for significant relationships (i.e., model 1: pampering and substance abuse; model 2: inferiority feelings and substance abuse). Results of these revised models indicated that both models of the direct effects between pampering and alcohol abuse and pampering and drug abuse demonstrated good fit for the data. Conversely, analysis of the direct effects between inferiority feelings and both alcohol and drug abuse resulted in a poor fit for the data.

Although results of the study indicated a good fit for the model examining the relationship between parental pampering and both alcohol and drug abuse, alternative to the hypothesis, the direct relationships in each model were not significant and negative. Contrary to the results of this study, researchers have argued the significant, positive relationship between parenting behaviors and externalizing behaviors in children. For example, overprotection (or high levels of behavioral control) in childhood has been linked to adolescent and adult substance use (Hawkins et al., 1992; Mak & Kinsella, 2007) and researchers have identified a relationship between parental enabling and

negative child outcomes (Lynch et al., 2002). In this study, the negative, non-significant relationship found between pampering and substance abuse could be a result of the recent shift in TAY using parents as a resource into later ages (Davis, 2003). TAY in college may view increased assistance and involvement from parents as a positive experience. Thus, those who do not perceive their parents as offering this positive assistance may turn to abuse of substances as a method of coping with the increased responsibilities present during the transition to adulthood.

Furthermore, findings from this study indicate that higher levels of autonomy granting are related to more substance abuse. Examination of the relationship between autonomy granting and substance abuse has yielded inconsistent results in previous studies, with some researchers indicating that a lack of autonomy granting is positively associated with externalizing behaviors (Kunz & Gych, 2013), while others have reported autonomy granting was not predictive of drug use in adolescents (Silk et al., 2003). Results of this study reveal that individuals who perceive their parents as encouraging independence and decision-making may be more likely to use substances as a result of this perceived autonomy. Finally, findings in this study suggest that because parental care loads negatively on the latent construct of pampering, higher levels of parental care are related to substance abuse. Inconsistent with results from this study, a relationship has been established between low levels of parental care and conduct problems, including drinking in adolescents (Mak & Kinsella, 2007). Discrepancies in these findings could be a result of the differing populations. According to Fingerman and colleagues (2012), child perceptions of parental care as imposed can lead to negative outcomes, suggesting

that if the current sample viewed this care as imposed, they may be more likely to view this care as detrimental. It is possible that college students who are less directly involved with their parents perceive higher levels of care as imposed, which could lead to abuse of substances; whereas adolescents, who are still living with their parents, may view low levels of care as indifference, which may lead to substance abuse due to lack of monitoring or as a coping mechanism for feelings related to this perceived indifference. The general fit of both pampering models in this study endorse describing pampering as a comprehensive parenting behavior that encompasses previously researched behaviors.

Unlike the modified models of pampering, the revised models that included the hypothesized relationships between inferiority feelings and alcohol and drug use were a poor fit for the data. Self-esteem, ASE, and shame have been examined in the literature as potential influences factors on the use of substances (e.g., Marlatt, 1985b; O'Connor et al., 1994; Parker & Benson, 2004). More specifically, self-esteem and ASE are thought to be negatively related to substance abuse (Burleson & Kaminer, 2005; Parker & Benson, 2004), whereas shame has been positively linked to substance abuse (Cook, 1988). Additionally, although GSE has not been examined specifically as it relates to substance abuse, it has been found to be positively associated with both self-esteem and task-specific self-efficacy (e.g. ASE; Judge et al., 1998; Sherer et al., 1982). Despite these findings in previous research, support for the hypothesized inferiority models was not found in the current study.

Examination of the mean scores for each individual observed inferiority construct demonstrates that overall, the current sample reported high levels of self-esteem, GSE,

ASE, and low levels of shame (see Table 1). Possible explanations for this trend could relate to the notion that the transitional ages that are characteristic of emerging adulthood are a time of self-focus and many individuals experience increased self-esteem during this time (Arnett, 2007; Sussman & Arnett, 2014). Moreover, the identified relationships between the observed variables make the argument for a similar trend in increased GSE and ASE, and decreased shame. Given this information, it is possible that the lack of fit of the models is due to the lack of experience of inferiority feelings in the current sample. The relationship between inferiority feelings and substance abuse may be more prevalent in a clinical population, as Adler suggested that intense feelings of inferiority manifest in an inferiority complex (Dreikurs, 1990). Inferiority complexes are behavioral representations of these more extreme feelings and substance abuse is reported to be a coping mechanism for these feelings and associated behaviors (Adler, 1926; Mosak & Maniacci, 1999). Thus, in the current sample, a relationship may not have been found as a majority of the participants reported social use of substances. In theory, inferiority feelings may not play a role in recreational use; however, a relationship between inferiority feelings and substance use may exist in the 21% of individuals reporting clinically significant alcohol use and the 9% reporting drug abuse or dependence. Additional research is necessary to further explore this possibility using a population who meet criteria for a substance use disorder.

Hypothesis Four: Test for Mediation

The original model presented in Figure 1 also proposed a partial mediation of the effect of inferiority feelings on the relationship between pampering and substance abuse.

The hypothesis was not supported by the model because a partial mediation cannot exist when one direct relationship is not significant. Because the relationship between inferiority feelings and substance abuse was not significant, a partial mediation was not found.

Hypothesis Five: Examination of Group Differences

Hypothesis five postulated that differences in the strength of relationships between the variables would exist when comparing individuals who reported a history of substance abuse treatment and those who did not. Hypothesis five could not be analyzed due to the small number of participants indicating a history of substance abuse treatment ($n = 4$). The lack of participants indicating a history of treatment is problematic in that 21% of the sample reported use of alcohol that meets criteria for an alcohol abuse or dependence diagnosis, and 7% met criteria for a drug abuse or dependence diagnosis based on level of reported use. The rates of clinically significant use of substances on college campuses coupled with the low rates of treatment history provide an argument for a need to increase both involvement in treatment and effectiveness of treatment in this population.

Limitations

Several limitations are noted with regards to the current study. Data for the current study was collected from one mid-sized university in the Southeastern United States, which restricts generalizability of the findings to other populations. Additionally, because data was collected in classes, individuals who may be at a higher risk of substance abuse may be missing from the sample, as missing class is a reported

consequence of substance abuse amongst college students (Core Institute, 2012). Moreover, the use of a college student population restricts findings to this subset of the TAY population, and does not provide any information on TAY with severe emotional disturbance (SED), including diagnosed substance use disorders, or the general TAY population. Furthermore, the length of the survey is extensive, which may have deterred eligible participants from participating in the survey or may have increased fatigue while responding to survey items. In fact, four participants returned half completed survey packets, highlighting response fatigue as potentially problematic in the sample. Response fatigue may be a particular limitation, as participants were asked to answer questions about perceptions of past parenting behaviors and the accuracy of these recollections cannot be determined. Boundaries were not placed on the length of time that was permitted to have lapsed since the experiences with these parenting behaviors, which could have impacted the accuracy of the recollections. Finally, despite the assurance of confidentiality of responses, because the survey items ask questions related to potentially illegal behavior (substance abuse), participants may have succumbed to socially desirable responding.

A variety of limitations are noted in relation to the proposed instrumentation. First, the LESP has had limited use in empirical research. The original LESP is meant to measure parent perspective of their own behaviors, but items have been modified to reflect TAY perceptions of parenting behaviors for the current study. Although the majority of instruments utilized in the study demonstrated good to excellent internal consistency, the LESP revealed inadequate reliability ($\alpha = .64$). Researchers who have

utilized the LESP reported good to excellent reliability estimates (r = .84, .92) when used with adults; however, the same researchers reported unacceptable to minimally acceptable reliability when administering the LESP to children (*r* = .63, .68, .74, .81; Lynch et al., 2002). Given the similar reliability findings in the current study, possible explanations for the questionable reliability could be due to alterations made to the items or the use of the instrument from child perspective, rather than parent perspective. Likewise, the PCS-YSR has not been used retrospectively in research. The reliability and validity of utilizing the PCS-YSR to examine TAY perceptions of parenting behaviors from childhood and adolescence had not been established prior to this study; however, reliability estimates in the current study (α = .82) support the retrospective use of the PCS-YSR. Lastly, although the AASE has been found to be a valid and reliable instrument (McKiernan et al., 2011), it has had limited use in empirical research and was initially normed on a clinical population. Although the utility of this instrument in exploring alcohol abstinence self-efficacy in a non-clinical college population had not been examined prior to this study, the internal consistency of each scale (α = .87 for confidence; α = .82 for temptation) revealed this AASE may be a reliable instrument when used with such a population. Further empirical exploration of the LESP, PCS-YSR, and AASE is necessary to confirm the utilization of these instruments in non-clinical, college-aged populations.

In the current study, the researcher chose to use "substance abuse" language, despite recent changes to the *Diagnostic and Statistical Manual of Mental Disorders: DSM-5* that have eliminated the distinction between substance abuse and substance

dependence in favor of one disorder (Substance Use Disorders; SUDs). Unlike abuse and dependence, SUDs are evaluated on a continuum of severity (APA, 2013). The use of the term substance abuse is intentional in that the instrumentations utilized to examine alcohol and drug use (AUDIT and DAST) are scored based on diagnostic criteria outlined in the *DSM-IV-TR*. Despite this, the scoring procedures of both measures are such that the higher the score, the more concerning the substance problem, which is consistent with the new continuum of SUDs. For example, the DAST provides a quantitative measure of problems related to drug misuse, with an arbitrary clinical cutoff. Thus, an increased total score indicates increased consequences, which is consistent with the continuum philosophy (Skinner, 1982). Additionally, mental health clinicians are not expected to fully adopt the *DSM-5* diagnoses until May of 2015, meaning participants who have a substance diagnosis may have been diagnosed based on the previous criteria. Consequently, the use of outdated language is intentional, but may be a limitation in the full study based on the existence of more recent methods of diagnosing substance-related problems.

Finally, various limitations are noted in regards to the findings in the study. In the model examining relationships between pampering and alcohol abuse, because the RMSEA global fit statistic demonstrated only satisfactory fit for the data, results should be interpreted with caution. Although other goodness of fit indices revealed the model to be a good fit for the data, RMSEA is particularly sensitive to parsimony, suggesting further exploration of the relationship between pampering and alcohol abuse is warranted. Additionally, path analysis assumes a normal distribution (Kline, 2011), but several

variables in the study demonstrated a leptokurtic distribution, and a positive or negative skewness. The lack of normality in these variables could have impacted the poor fit of the model and the weak significance found amongst some of the paths (e.g., pampering and substance abuse). Lastly, the negative residual present in relation to the self-esteem variable in the model exploring a potential empirical definition for inferiority feelings is considered a major limitation of the model. A negative residual could be a result of insufficient sample size or model mis-specification (Gagne & Hancock, 2006) and indicates a need for further examination of the constructs that make up inferiority feelings.

Implications

The findings from the present study examining definitions of the theoretical constructs of pampering and inferiority feelings and relationships between parental pampering, parental psychological control, inferiority feelings, and substance abuse in a sample of TAY in college possess implications for counseling research, practice, and training. In the following sections, implications for each setting are discussed.

For Future Research

The results of the current study present a variety of directions for future research that aim to incorporate Adlerian concepts in examining outcomes, as well as examining the relationship between parenting behaviors, thoughts and feelings about the self, and substance abuse. The CFAs for pampering and inferiority feelings both demonstrated good fit for the data, providing definitions to these latent constructs that are lacking in current literature. Researchers who wish to incorporate the concept of pampering into

research may benefit from using the measurable constructs of enabling, autonomy granting, parental care, and parental behavioral control as empirically validated constructs that encompass the method of parenting that Adler defines as pampering. In particular, researchers who are interested in parenting behaviors and their impact on outcomes may benefit from utilizing the overarching construct of pampering as it provides a deeper level of insight into the way in which a group of related parenting behaviors may impact an individual. However, although autonomy granting and parental behavioral control appear to strongly define the latent construct, future research might be necessary to explore a more holistic definition of pampering due to the poor factor loadings of enabling and parental care.

Similarly, the measurable constructs of self-esteem, GSE, ASE, and shame may adequately define the theoretical continuum of superiority and inferiority feelings, particularly as they relate substance abuse (due to the inclusion of the task-specific variable of ASE). Researchers who wish to examine internalizing experiences of the individual may benefit from this knowledge as it provides insight into how each of these constructs are related and play a role in an individual's evaluations about the self. Generally speaking, because the measurable constructs are found to be related to the larger construct of inferiority, it is possible that examining these constructs separately may not provide a comprehensive understanding of the way in which an individual views himself may impact other factors. Yet, the poor factor loadings of the variables GSE and ASE on inferiority feelings suggests a need to further explore potential variables that may define the latent construct. Specifically, inferiority feelings may exist in individuals who

do not abuse substances, thus, constructs that are not situation specific, such as ASE, may be worth exploring in the defining of the latent variable. The existence of empirical definitions for the Adlerian constructs of pampering and inferiority feelings can assist in infusing theory and research by allowing for empirically validated incorporation of theoretical constructs into research.

Although the original model hypothesizing relationships amongst the variables was not a good fit for the data, theoretical connections between each of the variables are present in the literature. Additional research is needed to test the model on alternate populations in order to examine potential empirical relationships between parental pampering, parental psychological control, inferiority feelings, and substance abuse. Specifically, because Adler highlights the inferiority complex as potentially influential on the abuse of substances, investigation of the hypothesized model using a clinical sample is warranted.

Finally, because the hypothesized models examining the relationship between pampering and alcohol and drug abuse were a good fit for the data, further research examining this relationship in other populations is important. Exploration of the construct of pampering as it relates to substance abuse in different cultures can provide insight into ways in which parenting behaviors impact children similarly or differently in varying cultures. Additionally, it will be important for researchers to better understand the implications of pampering in TAY not attending college, children and adolescents, and older individuals to explore potential positive relationships between pampering and substance abuse in these populations. Pampering may also have consequences for other

child outcomes, such as conduct disorder, delinquency, or aggression; thus, despite the negative relationship found between pampering and substance abuse, further research is necessary to examine relationships that may exist between pampering and other outcomes.

For Counselors

Findings from the current study have a particular impact on practicing counselors. Better understanding of the constructs that make up inferiority feelings can allow practitioners to focus on and address each of these constructs, which can provide a more holistic picture of an individual's evaluations of the self. Comprehensive understanding of these evaluations can improve the effectiveness of current treatment by addressing beliefs about the self as worthy, perceptions of competence, as well and internalized feelings of inadequacy and how they each may relate to individual outcomes. In the case of substance abuse, understanding and treating each of these internal thoughts and feelings, as well as working on abstinence self-efficacy can increase long-term results, as each may play a role in the use of substances. Additionally, because of the potential reciprocal nature of these relationships, knowledge of how substance abuse can impact feelings of inferiority can assist counselors in addressing and treating inferiority feelings through substance abuse treatment. Counselors can work with clients on improving their sense of worth, competence, and inadequacy as a method of improving positive outcomes.

In the same fashion, counselors can use the knowledge of parenting behaviors that make up pampering, and the understanding of the relationship between pampering and

substance abuse to tailor intervention and treatment programs to work with individuals and families as an approach to substance abuse. Parenting education can include potential positive and negative consequences to pampering a child and can provide examples of parenting behaviors that are related to positive child outcomes as a technique to include the family in the counseling process. Furthermore, because participants were asked to look back on parenting behaviors throughout their childhood, the extended impact these parenting behaviors can have into adulthood is apparent. Practitioners may use this knowledge as an early intervention strategy to decrease initiation of substance use.

College counselors may also benefit from the findings in this study. Family counseling may be less prevalent on college campuses due to the independence that the college life can bring, students potentially living away from home, and adult students not wanting parental involvement, for example. Despite the lack of parental presence in counseling on college campuses, results of this study make it evident that parents continue to be a presence in a child's life even when they may be less physically present. Parenting behaviors from childhood have the potential to impact college student functioning, thus should be a focus in the counseling relationship. College counselors can use the knowledge that parenting behaviors impact child outcomes to emphasize how those parenting behaviors may be impacting the client as an approach to addressing substance-related issues.

For Counselor Educators

Recent practice in the treatment of substance abuse counseling calls for the use of Evidence Based Treatments (EBTs; Jenson-Hoss & Hawley, 2010). EBTs provide empirical support for techniques, but they often lack a theoretical background. Results of this study provide empirical evidence of the relationship between pampering and substance abuse, with a strong theoretical grounding. Counselor educators who train students to work with individuals who struggle with substance abuse can use these findings to provide training that incorporates EBTs, while also providing a theoretical background for the approach.

Furthermore, the belief that substance abuse is a family disease and extends in impact past the individual, supports the inclusion of family factors when conceptualizing, preventing, and treating substance abuse. Counselor educators can integrate family concepts apparent in this study to teach counselors-in-training methods of including family members and family processes into treatment in hopes of providing more holistic and effective services. According to the Center for Substance Abuse Treatment (CSAT; 2004), current approaches to family counseling in substance abuse treatment fail to emphasize the family as the identified client. Findings from this study provide further evidence of the potential impact of family processes outside of the individual on individual outcomes (e.g., substance abuse), proving the need to take a more family counseling approach to substance abuse treatment. This need is also highlighted in the Council for Accreditation for Counseling and Related Educational Programs (CACREP; 2009) standards that require counseling programs to educate students on recognizing the

importance of family in the addiction treatment and recovery process and to demonstrate the ability to provide counseling services to families who are impacted by addiction. Counselor educators can use knowledge gained from this study to infuse family counseling concepts into substance abuse treatment in efforts to bridge the gap between family counseling and substance abuse counseling.

Conclusion

The purpose of this study was to define the Adlerian constructs of pampering and inferiority feelings and to test a proposed model of the relationships between these constructs, parental psychological control and substance abuse in a sample of college TAY. Results indicated that the observed constructs of enabling, autonomy granting, parental care, and parental behavioral control adequately define the latent construct of pampering, and the observed variables of self-esteem, GSE, ASE, and shame adequately define the latent construct of inferiority feelings. SEM analyses of the hypothesized model of the relationships between parental pampering, parental psychological control, inferiority feelings, and alcohol and drug abuse resulted in poor fit for the data; however, a revised model examining the direct effects between pampering and alcohol and drug abuse demonstrated good fit for the data. The proposition that the strengths of the relationships between variables would vary when comparing individuals indicating a history of substance abuse treatment and those denying a history of treatment was not examined due to low sample size. Future research is needed to explore potential model fit utilizing a clinical population. The findings from this study provide empirical definitions for the theoretical constructs of pampering and inferiority feelings.

Understanding of the related, but distinct constructs that make up pampering can impact future research by allowing researchers to examine relationships between this overarching parenting behavior and child outcomes. Similarly, the use of inferiority feelings as a holistic construct can increase our understanding of multiple evaluations of the self as they relate to individual outcomes. Understanding the relationships between pampering, inferiority feelings, and substance abuse in a clinical population can improve the way in which intervention and treatment programs are structured by addressing both individual and family issues into treatment. Additionally, addressing the experience of pampering in college students who use substances may increase treatment rates and improve outcomes in this population.

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APPENDIX A

CONSENT TO PARTICIPATE FORM

UNIVERSITY OF NORTH CAROLINA AT GREENSBORO

CONSENT TO ACT AS A HUMAN PARTICIPANT

Project Title: An Exploration of the Relationship Between Perceptions of Parenting Behaviors and Substance Abuse in Transition-Aged Youth

Principal Investigator and Faculty Advisor:
Principal Investigator: Katie A. Wachtel, MRC, CRC, LPC
Faculty Advisor: Kelly L. Wester, PhD.

What are some general things you should know about research studies?
You are being asked to take part in a research study. Your participation in the study is voluntary. You may choose not to join, or you may withdraw your consent to be in the study, for any reason, without penalty.

Research studies are designed to obtain new knowledge. This new information may help people in the future. There may not be any direct benefit to you for being in the research study. There also may be risks to being in research studies. If you choose not to be in the study or leave the study before it is done, it will not affect your relationship with the researcher or the University of North Carolina at Greensboro.
Details about this study are discussed in this consent form. It is important that you understand this information so that you can make an informed choice about being in this research study.

You can keep this consent form for your records. If you have any questions about this study at any time, you should ask the researchers named in this consent form. Their contact information is below.

What is the study about?
This is a research project. Your participation is voluntary. The purpose of this study is to gather information regarding the relationships between your perceptions of parenting behaviors when you were a child and adolescent, thoughts and feelings you hold about yourself, and use of substances. Your participation requires research that includes responding to a variety of survey questions.

Why are you asking me?
You are being asked to participate in this study because you are between the ages of 18

and 25 and are currently enrolled as an undergraduate student at UNCG.

What will you ask me to do if I agree to be in the study?
Should you choose to participate in the study, you will be asked to complete a series of questions provided in a survey packet. Questions will include perceptions of parenting behaviors from when you were a child/adolescent, current thoughts and feelings about yourself, current use of alcohol and drugs, and questions regarding demographic information. Your responses will be kept strictly confidential and you will not be asked to provide any information that could link your responses to your identity. Your name will not be associated in any way with your responses. The survey packet should take approximately 30-40 minutes to complete. Some of the survey questions may lead to some feelings of discomfort. If at any time you feel discomfort, you may choose to withdraw participation in the study without penalty. If at any time you have questions regarding the study, you may direct these questions to Katie A. Wachtel or Dr. Kelly Wester (contact information provided below).

Is there any audio/video recording?
There will be no audio or video recording in this study.

What are the risks to me?
The Institutional Review Board at the University of North Carolina at Greensboro has determined that participation in this study poses minimal risk to participants. You may experience some discomfort due to the nature of the questions. Should you feel any discomfort, you have the right to withdraw participation from the study without penalty or prejudice. You may also choose not to answer any question in which you are not comfortable responding. Should you choose to withdraw from or not participate in the study, your grade will not be affected. If you to wish to speak to a professional counselor regarding any emotions that arise, please contact the Vacc Counseling and Consulting Clinic (336-334-5340) located in 223 Ferguson Building at UNCG, The Counseling Center (336-334-5874) located in the Anna Gove Student Health Center at UNCG, or Fisher Park Counseling (336-542-2076) located at 208 E. Bessemer Ave. Greensboro, NC 27401. Or, you can call 1-800-662-HELP (4357) to contact a confidential, national helpline.

If you have questions, want more information or have suggestions, please contact Katie A. Wachtel who may be reached at (419) 346-5227 (kawachte@uncg.edu) or Dr. Kelly Wester who may be contacted at (336) 223-5312 (klwester@uncg.edu

If you have any concerns about your rights, how you are being treated, concerns or complaints about this project or benefits or risks associated with being in this study please contact the Office of Research Integrity at UNCG toll-free at (855)-251-2351.

Are there any benefits to society as a result of me taking part in this research?
There may be benefits to society based your participation in this study. The research may

help inform education, prevention, and treatment protocols aimed at decreasing and treating substance abuse among adults your age. Participation in the study may provide important information regarding the relationship between perceptions of family factors and substance abuse, which may dictate future interventions aimed at providing a more holistic approach to treatment of substance abuse.

Are there any benefits to *me* for taking part in this research study?
There are no direct benefits to you for your participation in this study. You may learn more about your own perceptions, thoughts, and feelings by completing this packet.

Will I get paid for being in the study? Will it cost me anything?
It will not cost you anything to participate in this study. You will have the option upon completion of the survey packet to enter into a drawing to win one of 8 $10.00 gift cards as a way of expressing gratitude for your time and participation.

How will you keep my information confidential?
You will not be required to provide your name in association with your survey packet, thus it will not be possible to trace your responses back to you. All survey packets, once completed, will be placed in a manila envelope and turned into a box at the front of the classroom to further protect your identity. Your survey packet will be assigned a numerical code that will not be linked with your identity. Your response packets will be kept in a locked drawer in a locked office on campus and all electronic data will be kept in a password protected file on a password protected computer belonging to the principal investigator. Should survey packet or feedback form information be breached, survey data cannot be linked to you because you will not be providing any identifying information. All survey packets will be shredded upon completion of the study. All information obtained in this study is strictly confidential unless disclosure is required by state law.

What if I want to leave the study?
You have the right to refuse to participate or to withdraw at any time, without penalty. If you do withdraw, it will not affect you or your grade in any way. If you choose to withdraw, you may request that any of your data which has been collected be destroyed unless it is in a de-identifiable state. The investigators also have the right to stop your participation at any time. This could be because you have had an unexpected reaction, or have failed to follow instructions, or because the entire study has been stopped.

What about new information/changes in the study?
If significant new information relating to the study becomes available which may relate to your willingness to continue to participate, this information will be provided to you.

Voluntary Consent by Participant:
By completing this survey packet, you are agreeing that you read the consent form, or it has been read to you, and you fully understand the contents of this document and are

openly willing consent to take part in this study. All of your questions concerning this study have been answered. By completing the survey packet, you are agreeing that you are:

- Between the ages of 18 and 25
- An undergraduate student at UNCG
- Are agreeing to participate, or have the individual specified above as a participant participate, in this study described to you by Katie A. Wachtel, Principal Investigator.

APPENDIX B

ORAL SCRIPT

- You are being asked if want to be in a research study. I am trying to explore relationships between perceptions of parenting behaviors, thoughts and feelings about the self, and substance use behaviors. I, Kate Wachtel, am the principle investigator. I am a third year doctoral student from the Department of Counseling and Educational Development at the University of North Carolina at Greensboro. The research is being overseen by Dr. Kelly L. Wester (my faculty advisor), an Associate Professor from the Department of Counseling and Educational Development at the University of North Carolina at Greensboro.
- You have been picked for this study because you are in a class that also includes individuals who are undergraduate students. In this study we are looking for individuals who are an undergraduate student at the University of North Carolina at Greensboro and between the ages of 18 and 25 to voluntarily participate.
- This discussion and the piece of paper (consent form) given to you will tell you about the study to help you decide if you want to be part of the study.
- If you choose to participate, you will be asked to complete a packet of forms including a demographic form and several assessments that measure perceptions of parenting behaviors, thoughts and feelings about the self, and substance use behaviors. Together, this will take approximately 30-40 minutes. Some questions related to thoughts and feelings about the self and substance use may create feelings of discomfort. If at any time, you feel discomfort, you may withdraw from this study without penalty.
- You will have the option to be entered into a drawing to win one of 8 $10.00 gift cards should you elect to participate.
- The benefits to (you and or society) being in this study include helping to determine the relationships between parenting behaviors, thoughts and feelings abou the self, and substance use in a sample of college students. Better understanding of these relationships may improve the way in which treatment for substance abuse is provided. Information gleaned from this study may help researchers and counselors design prevention and intervention programs. There are no direct benefits for participating in this study.
- The risks involved in this study are minimal, but may include feeling uncomfortable answering questions about thoughts and feelings about the self and current substance use. Should you feel uncomfortable at any time in this study it is your right to withdraw from the study without penalty or prejudice. You may also choose not to answer any question in which you are not comfortable responding. Should you choose to withdraw from or not participate in the study, your grade will not be affected.
- Your privacy will be protected by not requiring you to include your name or

signature so that your survey packet and feedback form cannot be traced back to you. Completed survey packets and feedback forms will be stored in a secured file cabinet and the responses will be entered into an electronic, password-protected file on the hard drive of the Principle Investigator. Should survey packet or feedback form information be breached, survey data cannot be linked to you because I am not collecting your name or any other identifying information. All information obtained in this study is strictly confidential unless disclosure is required by law. As a reminder your name or identifying information is not being collected on your survey and therefore none of your responses can be traced back to you.

- You should ask any questions you have before making up your mind to participate.
- If you decide you do not want to be in the study later you are free to discontinue completion of the survey packet whenever you like without penalty or unfair treatment.
- If you have any questions, you may contact me, the principle investigator, Katie A. Wachtel, at or my faculty advisor, Dr. Kelly Wester. Specific contact information for both myself and my faculty advisor will be available on the consent form provided to you.

APPENDIX C

PILOT STUDY SURVEY PACKET

Survey Packet

For the following sets of questions, please respond as you would have **perceived things when you were a child/adolescent**. When responding, only answer questions based on the parent whom you believe to have been your ***primary*** **caregiver** during childhood and adolescence. In other words, respond based on the parent with whom you had the most interaction.

Below you will find a problem and the way in which you perceive the problem would have been handled. What is the extent to which you would agree or disagree with the way in which your *primary parent* would have acted when you were a *child/adolescent*. Pick one of the four responses that best fits with your perception of your parent's philosophy of parenting and check the corresponding box. Don't overanalyze any items. Just give your first response. There is no correct or incorrect answer.

	Agree	Somewhat Agree	Somewhat Disagree	Disagree
1. If, as a sixteen-year-old, I drove over the lawn mower our neighbor parked in our drive while visiting, my parent would maintain that the neighbor shouldn't have left it there.				
2. If, as a ten-year-old, I missed the bus for the third time, my parents would have called a cab and taken the fare out of my allowance.				
3. If I dyed my hair against my parent's advice and it was a disaster, my parent would allow me to stay home from school.				
4. If, as a teenager, I had difficulty getting out of bed in the morning, my parent would have given me an alarm clock to get myself up.				
5. If I had been caught with alcohol at a school function, my parent would support school policy as long as I agreed with the policy.				
6. My parent believed I did well in school when teachers cared about me.				
7. If I had been sent to the office for calling the teacher a name, my parent would not tolerate such behavior				
8. If, as a child, I threw temper tantrums, my parent eventually gave in.				
9. If I lied, my parent would no longer accept my word as truth.				
10. If I were on the athletic team and was discouraged because I was not playing as much as I would like, my parent would talk to the coach.				
11. If, as a teenager, I called to tell my parent that I forgot my lunch money again, my parent would bring it to me.				
12. If I wanted to give a grandmother a gift but did not have the money, my parent would give me				

the money.				
13. If I frequently forgot to do chores, my parent would remind me until they were done.				
14. If, as a teenager, I were caught shoplifting, my parent would allow the store to follow their policy of arrest.				
15. If I had been caught with alcohol at a school function, my parent would accept the school disciplinary action.				
16. If I had been sent to the office for calling the teacher a name, my parent would try to determine if my behavior was justified.				
17. If in order to fit in at school I wanted designer clothing, my parent would shift the money in the budget to purchase it.				
	Agree	**Somewhat Agree**	**Somewhat Disagree**	**Disagree**
18. If, as a ten-year-old, I repeatedly failed to pick up (toys, clothes, etc.) after myself, my parent would put the items "out of use" for a period of time.				
19. If I wanted to give a grandmother a birthday gift but didn't have the money, my parent would lend me the money.				
20. My parent believed I did well in school when I did what was expected of me.				
21. My parent expected me to manage money on an "as needed" basis.				
22. If I were on the athletic team and was discouraged because I wasn't playing as much as I would like, my parent would tell me to stay on the team for the remainder of the season.				
23. My parent reminded me to put my laundry in the hamper.				
24. If after several warnings, I continued to neglect the care of my pet, my parent would care for the pet him/herself.				
25. If, as a teenager, I called to tell my parent that I forgot my lunch money again, my parent would not intervene.				
26. If, as a teenager, I had difficulty getting out of bed in the morning, my parent would call me until I got up.				
27. If in order to fit in at school I wanted designer clothing, my parent would tell me I can have what I can pay for.				
28. If, as a teenager, I were caught shoplifting, my parent would offer to pay for the item.				
29. If, as a ten-year-old, I missed the bus for the third time, my parent would take me to school.				

30. If I dyed my hair against my parent's advice and it was a disaster, my parent would require me to attend school the next day as usual.				
31. If I frequently forgot to do chores, my parent would assess a consequence.				
32. If, as a sixteen-year-old, I drove over the lawn mower the neighbor parked in our drive while visiting, my parent would tell the neighbor and make arrangements to pay.				
33. If I had a job while trying to go to school and my grades were dropping, my parent would accept that I was doing the best possible under the circumstances.				
34. If I had a job while trying to go to school and my grades were dropping, my parent would require me to make a choice to improve the grades or quit the job.				
35. My parent only laundered what was in the hamper.				
36. If, as a ten-year-old, I repeatedly failed to pick up (toys, clothes, etc.) after myself, my parent would consider it "pretty normal" for kids.				
37. If after several warnings I continued to neglect the care of my pet, my parent would find the pet another home.				
38. If as a child I lied, my parent would question whether he/she pressured me into lying.				
39. If as a child I threw a tempter tantrum, my parent would ignore me and walk off.				
40. My parent expected me to manage money with an adequate allowance.				

My primary caregiver is a person who…

	Not like him/her	**Somewhat like him/her**	**A lot like him/her**
1. Changes the subject, whenever I have something to say.			
2. Finishes my sentences whenever I talk.			
3. Often interrupts me.			
4. Acts like she/he knows what I'm thinking or feeling.			
5. Would like to be able to tell me how to feel or think about things all the time.			
6. Is always trying to change how I feel or think about things.			
7. Blames me for other family members' problems.			
8. Brings up my past mistakes when she/he criticizes me.			

This questionnaire lists various attitudes and behaviors of parents. As you remember your PRIMARY CAREGIVER in your first 16 years, place a mark in the most appropriate box next to each question.

	Very like	Moderately like	Moderately unlike	Very unlike
1. Spoke to me in a warm and friendly voice				
2. Did not help me as much as I needed				
3. Let me do those things I liked doing				
4. Seemed emotionally cold to me				
5. Appeared to understand my problems and worries				
6. Was affectionate to me				
7. Liked me to make my own decisions				
8. Did not want me to grow up				
9. Tried to control everything I did				
10. Invaded my privacy				
11. Enjoyed talking things over with me				
12. Frequently smiled at me				
13. Tended to baby me				
14. Did not seem to understand what I needed or wanted				
15 Let me decide things for myself				
16. Made me feel I wasn't wanted				
17. Could make me feel better when I was upset				
18. Did not talk with me very much				
19. Tried to make me feel dependent on him/her				
20. Felt I could not look after myself unless she/he was around				
21. Gave me as much freedom as I wanted				
22. Let me go out as often as I wanted				
23. Was overprotective of me				
24. Did not praise me				
25. Let me dress in any way I pleased				

For the following sets of questions, please respond as you would ***now***.

Below is a list of statements dealing with your general feelings about yourself. Please indicate how strongly you agree or disagree with each statement.

	Strongly Agree	Agree	Disagree	Strongly Disagree
1. On the whole, I am satisfied with myself.				
2. At times I think I am no good at all.				
3. I feel that I have a number of good qualities.				
4. I am able to do things as well as most other people.				

5. I feel I do not have much to be proud of.				
6. I certainly feel useless at times.				
7. I feel that I'm a person of worth, at least on an equal plane with others.				
8. I wish I could have more respect for myself.				
9. All in all, I'm inclined to feel that I am a failure.				
10. I take a positive attitude toward myself.				

Listed below are a number of situations that lead some people to drink alcohol or use drugs. Circle the number that best describes your temptation or confidence to drink alcohol or use drugs in each situation.

	Not at all	**Not very**	**Moderately**	**Very**	**Extremely**
1. How tempted would you be to drink or use drugs when you are emotionally upset (feeling down, angry, afraid, or guilty)?	1	2	3	4	5
2. How tempted would you be to drink or use drugs when around or seeing others who are using—such as during celebrations or on vacation?	1	2	3	4	5
3. How tempted would you be to drink or use drugs when you experience physical pain, such as a headache, injury, or are physically tired?	1	2	3	4	5
4. How tempted would you be to drink or use drugs when you have thoughts of using—while either awake or dreaming?	1	2	3	4	5
5. How tempted would you be to drink or use drugs when you are feeling a physical need or craving for drugs or alcohol?	1	2	3	4	5
6. How tempted would you be to drink or use drugs when you have an urge to try just one drink or use drugs just once to see what happens?	1	2	3	4	5
	Not at all	**Not very**	**Moderately**	**Very**	**Extremely**
7. How confident would you be *not* to drink or use drugs when you are emotionally upset (feeling	1	2	3	4	5

down, angry, afraid, or guilty)?					
8. How confident would you be *not* to drink or use drugs when around or seeing others who are using—such as during celebrations or on vacation?	1	2	3	4	5
9. How confident would you be *not* to drink or use drugs when you experience physical pain, such as headache, injury, or are physically tired?	1	2	3	4	5
10. How confident would you be *not* to drink or use drugs when you have thought of using—while either awake or dreaming?	1	2	3	4	5
11. How confidence would you be *not* to drink or use drugs when you are feeling a physical need or craving for drugs or alcohol?	1	2	3	4	5
12. How confident would you be *not* to drink or use drugs when you have an urge to try just one drink or use drugs just once to see what happens?	1	2	3	4	5

Below is a list of statements describing feelings or experiences that you may have from time to time or that are familiar to you because you have had these feelings and experiences for a long time. Most of these statements describe feelings and experiences that are generally painful or negative in some way. Some people will seldom or never have had many of these feelings. Everyone has had some of these feelings at some time, but if you find that these statements describe the way you feel a good deal of the time, it can be painful just reading them. Try to be as honest as you can in responding.

Read each statement carefully and circle the number to the right of the item that indicates the frequency with which you find yourself feeling or experiencing what is described in the statement. Use the scale below. DO NOT OMIT ANY ITEM.

	Never	**Seldom**	**Sometimes**	**Often**	**Almost Always**
1. I feel like I am never quite good enough.	0	1	2	3	4
2. I feel somehow left out.	0	1	2	3	4
3. I think that people look down on me.	0	1	2	3	4
4. All in all, I am inclined to feel that I am a success.	0	1	2	3	4

5. I scold myself and put myself down.	0	1	2	3	4
6. I feel insecure about others' opinions of me	0	1	2	3	4
	Never	**Seldom**	**Sometimes**	**Often**	**Almost Always**
7. Compared to other people, I feel like I somehow never measure up.	0	1	2	3	4
8. I see myself as being very small and insignificant.	0	1	2	3	4
9. I feel I have much to be proud of.	0	1	2	3	4
10. I feel intensely inadequate and full of self-doubt.	0	1	2	3	4
11. I feel as if I am somehow defective as a person, like there is something basically wrong with me.	0	1	2	3	4
12. When I compare myself to others I am just not as important.	0	1	2	3	4
13. I have an overpowering dread that my faults will be revealed in front of others.	0	1	2	3	4
14. I feel I have a number of good qualities.	0	1	2	3	4
15. I see myself striving for perfection only to continually fall short.	0	1	2	3	4
16. I think others are able to see my defects.	0	1	2	3	4
17. I could beat myself over the head with a club when I make a mistake.	0	1	2	3	4
18. On the whole, I am satisfied with myself.	0	1	2	3	4
19. I would like to shrink away when I make a mistake.	0	1	2	3	4
20. I replay painful events over and over in my mind until I am overwhelmed.	0	1	2	3	4
21. I feel I am a person of worth at least on an equal plane with others.	0	1	2	3	4
22. At times I feel like I will break into a thousand pieces.	0	1	2	3	4

23. I feel as if I have lost control over my body functions and my feelings.	0	1	2	3	4
24. Sometimes I feel no bigger than a pea.	0	1	2	3	4
25. At times I feel so exposed that I wish the earth would open up and swallow me.	0	1	2	3	4
26. I have this painful gap within me that I have not been able to fill.	0	1	2	3	4
27. I feel empty and unfulfilled.	0	1	2	3	4
28. I take a positive attitude toward myself.	0	1	2	3	4
29. My loneliness is more like emptiness.	0	1	2	3	4
30. I feel like there is something missing.	0	1	2	3	4

Place an X in the box that best describes your answer to each question.

1. How often do you have a drink of alcohol?	Never	Monthly or less	2-4 times a month	2-3 times a week	4 or more times a week
2. How many drinks containing alcohol do you have on a typical day when you are drinking?	1 or 2	3 or 4	5 or 6	7 to 9	10 or more
3. How often do you have six or more drinks on one occasion?	Never	Less than Monthly	Monthly	Weekly	Daily or almost daily
4. How often during the last year have you found that you were not able to stop drinking once you had started?	Never	Less than Monthly	Monthly	Weekly	Daily or almost daily
5. How often during the last year have you failed to do what was normally expected of you because of drinking?	Never	Less than Monthly	Monthly	Weekly	Daily or almost daily
6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?	Never	Less than Monthly	Monthly	Weekly	Daily or almost daily
7. How often during the last	Never	Less than	Monthly	Weekly	Daily or

year have you had a feeling of guilt or remorse after drinking?		Monthly			almost daily
8. How often during the last year have you been unable to remember what happened the night before because of your drinking?	Never	Less than Monthly	Monthly	Weekly	Daily or almost daily
9. Have you or someone else been injured because of your drinking?	No		Yes, but not in the last year		Yes, during the last year
10. Has a relative, friend, doctor, or other health care worker been concerned about your drinking or suggested you cut down?	No		Yes, but not in the last year		Yes, during the last year

The following questions concern information about your involvement with drugs. Drug abuse refers to (1) the use of prescribed or "over-the-counter" drugs in excess of the directions, and (2) any non-medical use of drugs. Consider the past year (12 months) and carefully read each statement. Then decide whether your answer is YES or NO and check the appropriate space. Please be sure to answer every question.

	YES	NO
1. Have you used drugs other than those required for medical reasons?	Y	N
2. Have you abused prescription drugs?	Y	N
3. Do you abuse more than one drug at a time?	Y	N
4. Can you get through the week without using drugs (other than those required for medical reasons)?	Y	N
5. Are you always able to stop using drugs when you want to?	Y	N
6. Do you abuse drugs on a continuous basis?	Y	N
7. Do you try to limit your drug use to certain situations?	Y	N
8. Have you had "blackouts" or "flashbacks" as a result of drug use?	Y	N
9. Do you ever feel bad about your drug abuse?	Y	N
10. Do your parents ever complain about your involvement with drugs?	Y	N
11. Do your friends or relatives know or suspect you abuse drugs?	Y	N
12. Has drug abuse ever created problems between you and your parents?	Y	N
13. Has any family member ever sought help for problems related to your drug use?	Y	N

14. Have you ever lost friends because of your use of drugs? Y N
15. Have you ever neglected your family or missed work because of your use of drugs? Y N
16. Have you ever been in trouble at work because of drug abuse? Y N
17. Have you ever lost a job because of drug abuse? Y N
18. Have you gotten into fights when under the influence of drugs? Y N
19. Have you ever been arrested because of unusual behavior while under the influence of drugs? Y N
20. Have you ever been arrested for driving while under the influence of drugs? Y N
21. Have you engaged in illegal activities in order to obtain drugs? Y N
22. Have you ever been arrested for possession of illegal drugs? Y N
23. Have you ever experienced withdrawal symptoms as a result of heavy drug intake? Y N
24. Have you had medical problems as a result of your drug use (e.g., memory loss, hepatitis, convulsions, bleeding, etc.)? Y N
25. Have you ever gone to anyone for help for a drug problem? Y N
26. Have you ever been in a hospital for medical problems related to your drug use? Y N
27. Have you ever been involved in a treatment program specifically related to drug use? Y N
28. Have you been treated as an outpatient for problems related to drug abuse? Y N

What is your age? _____

What is your gender (circle one): Male FemaleOther

How do you describe yourself (check all that apply):

□ White (non-hispanic)
□ Black/African-American/Caribbean
□ Hispanic or Latino/a
□ Asian or Pacific Islander
□ American Indian, Alaska Native, or Native Hawaiian
□ Bi-racial or Multiracial
□ Other: _____

What is your year in college (check one)?

□ First-year undergraduate
□ Second-year undergraduate
□ Third-year undergraduate
□ Fourth-year undergraduate
□ Fifth-year or more undergraduate
□ Graduate student
□ Other: _____

What is your current residence?

□ On-campus residence hall
□ On-campus residential learning community
□ Greek Housing
□ Off-campus housing
□ Parent or guardian home
□ Other: _____

How many caregivers were present in the home during *the majority* of your childhood/adolescence?

_____

Who did you consider your primary caregiver throughout *the majority* of your childhood/adolescence?

□ Mother
□ Father
□ Grandmother
□ Grandfather
□ Aunt
□ Uncle
□ Brother
□ Sister
□ Stepmother
□ Stepfather
□ Foster mother
□ Foster father
□ Other:_____

At what age did you first drink alcohol (beyond just a sip)?

_____ □ Have never used alcohol

At what age did you first use drugs?

_____ □ Have never used drugs

Were you ever in treatment for substance-related problems as an adolescent?
□ Yes □ No

APPENDIX D

PILOT STUDY FEEDBACK FORM

Please complete this brief feedback form when you have finished the survey packet. Please provide suggestions on any changes you see that would make this process better. Your comments are very helpful to the process.

1. How long did it take you to complete the survey packet?

   _____

2. Were the instructions clear and easy to follow? Please explain:

_____

_____

_____

_____

_____

3. If any of the specific questions were difficult to understand, please provide feedback on what was unclear and/or how it could be improved. Please provide the page the item is located.

_____

_____

_____

_____

_____

4. Do you have any other suggested improvements to the study?

_____

_____

_____

_____

APPENDIX E

COMMUNITY RESOURCE LIST

Campus and Community Resources

- Vacc Counseling and Consulting Clinic (336-334-5340) located in 223 Ferguson Building at UNCG
- The Counseling Center (336-334-5874) located in the Anna Gove Student Health Center at UNCG
- Fisher Park Counseling (336-542-2076) located at 208 E. Bessemer Ave. Greensboro, NC 27401
- The Insight Program (336-852-3033) located at 3714 Alliance Dr. Greensboro, NC 27407
- SAMHSA National Helpline, a confidential, free, 24-hour-a-day, 365-day-a-year, information service, in English and Spanish, for individuals and family members facing mental health and/or substance use disorders. This service provides referrals to local treatment facilities, support groups, and community-based organizations. **Call 1-800-662-HELP (4357)**

APPENDIX F

MODIFIED SURVEY PACKET

Survey Packet

How many caregivers were present in the home during *the majority* of your childhood/adolescence?

_____

Who did you consider your *primary* caregiver (e.g. mother, father, grandmother) throughout *the majority* of your childhood/adolescence (please indicate one person)?

_____

For the following sets of questions, please respond as you would have **perceived things when you were a child/adolescent**. When responding, only answer questions based on the parent whom you believe to have been your ***primary* caregiver** during childhood and adolescence. In other words, respond based on the parent with whom you had the most interaction.

Below you will find a problem and the way in which you perceive the problem would have been handled. What is the extent to which you would agree or disagree with the way in which your *primary parent* would have acted when you were a *child/adolescent*. Pick one of the four responses that best fits with your perception of your parent's philosophy of parenting and check the corresponding box. Don't overanalyze any items. Just give your first response. There is no correct or incorrect answer.

	Agree	Somewhat Agree	Somewhat Disagree	Disagree
1. If, as a sixteen-year-old, I drove over the lawn mower our neighbor parked in our drive while visiting, my parent would maintain that the neighbor shouldn't have left it there.				
2. If, as a ten-year-old, I missed the bus for the third time, my parents would have called a cab and taken the fare out of my allowance.				
3. If I dyed my hair against my parent's advice and it was a disaster, my parent would allow me to stay home from school.				
4. If, as a teenager, I had difficulty getting out of bed in the morning, my parent would have given me an alarm clock to get myself up.				
5. If I had been caught with alcohol at a school function, my parent would support school policy as long as I agreed with the policy.				
6. My parent believed I did well in school when teachers cared about me.				
7. If I had been sent to the office for calling the teacher a name, my parent would not tolerate such behavior				
8. If, as a child, I threw temper tantrums, my parent				

eventually gave in.				
9. If I lied, my parent would no longer accept my word as truth.				
10. If I were on the athletic team and was discouraged because I was not playing as much as I would like, my parent would talk to the coach.				
11. If, as a teenager, I called to tell my parent that I forgot my lunch money again, my parent would bring it to me.				
12. If I wanted to give a grandmother a gift but did not have the money, my parent would give me the money.				
	Agree	**Somewhat Agree**	**Somewhat Disagree**	**Disagree**
13. If I frequently forgot to do chores, my parent would remind me until they were done.				
14. If, as a teenager, I were caught shoplifting, my parent would allow the store to follow their policy of arrest.				
15. If I had been caught with alcohol at a school function, my parent would accept the school disciplinary action.				
16. If I had been sent to the office for calling the teacher a name, my parent would try to determine if my behavior was justified.				
17. If in order to fit in at school I wanted designer clothing, my parent would shift the money in the budget to purchase it.				
18. If, as a ten-year-old, I repeatedly failed to pick up (toys, clothes, etc.) after myself, my parent would put the items "out of use" for a period of time.				
19. If I wanted to give a grandmother a birthday gift but didn't have the money, my parent would lend me the money.				
20. My parent believed I did well in school when I did what was expected of me.				
21. My parent expected me to manage money on an "as needed" basis.				
22. If I were on the athletic team and was discouraged because I wasn't playing as much as I would like, my parent would tell me to stay on the team for the remainder of the season.				
23. My parent reminded me to put my laundry in the hamper.				
24. If after several warnings, I continued to neglect the care of my pet, my parent would care for the pet him/herself.				
25. If, as a teenager, I called to tell my parent that I forgot my lunch money again, my parent would not intervene.				

26. If, as a teenager, I had difficulty getting out of bed in the morning, my parent would call me until I got up.				
27. If in order to fit in at school I wanted designer clothing, my parent would tell me I can have what I can pay for.				
28. If, as a teenager, I were caught shoplifting, my parent would offer to pay for the item.				
29. If, as a ten-year-old, I missed the bus for the third time, my parent would take me to school.				
30. If I dyed my hair against my parent's advice and it was a disaster, my parent would require me to attend school the next day as usual.				
31. If I frequently forgot to do chores, my parent would assess a consequence.				
32. If, as a sixteen-year-old, I drove over the lawn mower the neighbor parked in our drive while visiting, my parent would tell the neighbor and make arrangements to pay.				
33. If I had a job while trying to go to school and my grades were dropping, my parent would accept that I was doing the best possible under the circumstances.				
34. If I had a job while trying to go to school and my grades were dropping, my parent would require me to make a choice to improve the grades or quit the job.				
35. My parent only laundered what was in the hamper.				
	Agree	**Somewhat Agree**	**Somewhat Disagree**	**Disagree**
36. If, as a ten-year-old, I repeatedly failed to pick up (toys, clothes, etc.) after myself, my parent would consider it "pretty normal" for kids.				
37. If after several warnings I continued to neglect the care of my pet, my parent would find the pet another home.				
38. If as a child I lied, my parent would question whether he/she pressured me into lying.				
39. If as a child I threw a tempter tantrum, my parent would ignore me and walk off.				
40. My parent expected me to manage money with an adequate allowance.				

Please indicate how strongly you agree or disagree with each statement

	Strongly Agree	**Agree**	**Disagree**	**Strongly Disagree**
1. I feel that this parent gives me enough freedom.				

2. This parent allows me to choose my own friends without interfering too much.				
3. This parent allows me to decide what is right and wrong without interfering too much.				
4. This parent allows me to decide what clothes I should wear without interfering too much.				
5. This parent allows me to choose my own dating partner without interfering too much.				
6. This parent has confidence in my ability to make my own decision.				
7. This parent encourages me to help in making decisions about family matters.				
8. This parent allows me to make my own decisions about career goals without interfering too much.				
9. This parent allows me to make my own decisions about educational goals without interfering too much.				
10. This parent lets me be my own person in enough situations.				

My primary caregiver is a person who…

	Not like him/her	**Somewhat like him/her**	**A lot like him/her**
1. Changes the subject, whenever I have something to say.			
2. Finishes my sentences whenever I talk.			
3. Often interrupts me.			
4. Acts like she/he knows what I'm thinking or feeling.			
5. Would like to be able to tell me how to feel or think about things all the time.			
6. Is always trying to change how I feel or think about things.			
7. Blames me for other family members' problems.			
8. Brings up my past mistakes when she/he criticizes me.			

This questionnaire lists various attitudes and behaviors of parents. As you remember your PRIMARY CAREGIVER in your first 16 years, place a mark in the most appropriate box next to each question.

	Very like	Moderately like	Moderately unlike	Very unlike
1. Spoke to me in a warm and friendly voice				
2. Did not help me as much as I needed				
3. Let me do those things I liked doing				
4. Seemed emotionally cold to me				
5. Appeared to understand my problems and worries				
6. Was affectionate to me				
7. Liked me to make my own decisions				
8. Did not want me to grow up				
9. Tried to control everything I did				
10. Invaded my privacy				
11. Enjoyed talking things over with me				
12. Frequently smiled at me				
13. Tended to baby me				
14. Did not seem to understand what I needed or wanted				
15 Let me decide things for myself				
16. Made me feel I wasn't wanted				
17. Could make me feel better when I was upset				
18. Did not talk with me very much				
19. Tried to make me feel dependent on him/her				
20. Felt I could not look after myself unless she/he was around				
21. Gave me as much freedom as I wanted				
22. Let me go out as often as I wanted				
23. Was overprotective of me				
24. Did not praise me				
25. Let me dress in any way I pleased				

For the following sets of questions, please respond as you would ***now***.

Below is a list of statements dealing with your general feelings about yourself. Please indicate how strongly you agree or disagree with each statement.

	Strongly Agree	Agree	Disagree	Strongly Disagree
1. On the whole, I am satisfied with myself.				
2. At times I think I am no good at all.				
3. I feel that I have a number of good qualities.				

4. I am able to do things as well as most other people.				
5. I feel I do not have much to be proud of.				
6. I certainly feel useless at times.				
7. I feel that I'm a person of worth, at least on an equal plane with others.				
8. I wish I could have more respect for myself.				
9. All in all, I'm inclined to feel that I am a failure.				
10. I take a positive attitude toward myself.				

Read each statement below and mark the response that best fits your personal belief.

	Strongly Agree	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**
1. I will be able to achieve most of the goals that I have set for myself.					
2. When facing difficulty tasks, I am certain that I will accomplish them.					
3. In general, I think that I can obtain outcomes what are important to me.					
4. I believe I can succeed at most any endeavor to which I set my mind.					
5. I will be able to successfully overcome many challenges.					
6. I am confident that I can perform effectively on many different tasks.					
7. Compared to other people, I can do most tasks very well.					
8. Even when things are tough, I can perform quite well.					

Listed below are a number of situations that lead some people to drink alcohol or use drugs. Circle the number that best describes your temptation or confidence to drink alcohol or use drugs in each situation.

	Not at all	**Not very**	**Moderately**	**Very**	**Extremely**
13. How tempted would you be to drink or use drugs when you are emotionally upset (feeling down, angry, afraid, or guilty)?	1	2	3	4	5
	Not at all	**Not very**	**Moderately**	**Very**	**Extremely**
14. How tempted would you be	1	2	3	4	5

to drink or use drugs when around or seeing others who are using—such as during celebrations or on vacation?					
15. How tempted would you be to drink or use drugs when you experience physical pain, such as a headache, injury, or are physically tired?	1	2	3	4	5
16. How tempted would you be to drink or use drugs when you have thoughts of using—while either awake or dreaming?	1	2	3	4	5
17. How tempted would you be to drink or use drugs when you are feeling a physical need or craving for drugs or alcohol?	1	2	3	4	5
18. How tempted would you be to drink or use drugs when you have an urge to try just one drink or use drugs just once to see what happens?	1	2	3	4	5
19. How confident would you be *not* to drink or use drugs when you are emotionally upset (feeling down, angry, afraid, or guilty)?	1	2	3	4	5
20. How confident would you be *not* to drink or use drugs when around or seeing others who are using—such as during celebrations or on vacation?	1	2	3	4	5
21. How confident would you be *not* to drink or use drugs when you experience physical pain, such as headache, injury, or are physically tired?	1	2	3	4	5
22. How confident would you be *not* to drink or use drugs when you have thought of using—while either awake or dreaming?	1	2	3	4	5
23. How confidence would you	1	2	3	4	5

be *not* to drink or use drugs when you are feeling a physical need or craving for drugs or alcohol?					
24. How confident would you be *not* to drink or use drugs when you have an urge to try just one drink or use drugs just once to see what happens?	1	2	3	4	5

Below is a list of statements describing feelings or experiences that you may have from time to time or that are familiar to you because you have had these feelings and experiences for a long time. Most of these statements describe feelings and experiences that are generally painful or negative in some way. Some people will seldom or never have had many of these feelings. Everyone has had some of these feelings at some time, but if you find that these statements describe the way you feel a good deal of the time, it can be painful just reading them. Try to be as honest as you can in responding.

Read each statement carefully and circle the number to the right of the item that indicates the frequency with which you find yourself feeling or experiencing what is described in the statement. Use the scale below. DO NOT OMIT ANY ITEM.

	Never	**Seldom**	**Sometimes**	**Often**	**Almost Always**
1. I feel like I am never quite good enough.	0	1	2	3	4
2. I feel somehow left out.	0	1	2	3	4
3. I think that people look down on me.	0	1	2	3	4
4. All in all, I am inclined to feel that I am a success.	0	1	2	3	4
5. I scold myself and put myself down.	0	1	2	3	4
6. I feel insecure about others' opinions of me	0	1	2	3	4
7. Compared to other people, I feel like I somehow never measure up.	0	1	2	3	4
8. I see myself as being very small and insignificant.	0	1	2	3	4
9. I feel I have much to be proud of.	0	1	2	3	4
10. I feel intensely inadequate and full of self-doubt.	0	1	2	3	4
11. I feel as if I am somehow	0	1	2	3	4

defective as a person, like there is something basically wrong with me.					
12. When I compare myself to others I am just not as important.	0	1	2	3	4
13. I have an overpowering dread that my faults will be revealed in front of others.	0	1	2	3	4
14. I feel I have a number of good qualities.	0	1	2	3	4
15. I see myself striving for perfection only to continually fall short.	0	1	2	3	4
16. I think others are able to see my defects.	0	1	2	3	4
17. I could beat myself over the head with a club when I make a mistake.	0	1	2	3	4
18. On the whole, I am satisfied with myself.	0	1	2	3	4
19. I would like to shrink away when I make a mistake.	0	1	2	3	4
20. I replay painful events over and over in my mind until I am overwhelmed.	0	1	2	3	4
21. I feel I am a person of worth at least on an equal plane with others.	0	1	2	3	4
22. At times I feel like I will break into a thousand pieces.	0	1	2	3	4
23. I feel as if I have lost control over my body functions and my feelings.	0	1	2	3	4
24. Sometimes I feel no bigger than a pea.	0	1	2	3	4
	Never	**Seldom**	**Sometimes**	**Often**	**Almost Always**
25. At times I feel so exposed that I wish the earth would open up and swallow me.	0	1	2	3	4
26. I have this painful gap within me that I have not been able to fill.	0	1	2	3	4
27. I feel empty and unfulfilled.	0	1	2	3	4
28. I take a positive attitude toward myself.	0	1	2	3	4
29. My loneliness is more like emptiness.	0	1	2	3	4
30. I feel like there is something missing.	0	1	2	3	4

Place an X in the box that best describes your answer to each question.

1. How often do you have a drink of alcohol?	Never	Monthly or less	2-4 times a month	2-3 times a week	4 or more times a week
2. How many drinks containing alcohol do you have on a typical day when you are drinking?	1 or 2	3 or 4	5 or 6	7 to 9	10 or more
3. How often do you have six or more drinks on one occasion?	Never	Less than Monthly	Monthly	Weekly	Daily or almost daily
4. How often during the last year have you found that you were not able to stop drinking once you had started?	Never	Less than Monthly	Monthly	Weekly	Daily or almost daily
5. How often during the last year have you failed to do what was normally expected of you because of drinking?	Never	Less than Monthly	Monthly	Weekly	Daily or almost daily
6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?	Never	Less than Monthly	Monthly	Weekly	Daily or almost daily
7. How often during the last year have you had a feeling of guilt or remorse after drinking?	Never	Less than Monthly	Monthly	Weekly	Daily or almost daily
8. How often during the last year have you been unable to remember what happened the night before because of your drinking?	Never	Less than Monthly	Monthly	Weekly	Daily or almost daily
9. Have you or someone else been injured because of your drinking?	No		Yes, but not in the last year		Yes, during the last year
10. Has a relative, friend, doctor, or other health care worker been concerned about your drinking or suggested you cut down?	No		Yes, but not in the last year		Yes, during the last year

The following questions concern information about your involvement with drugs. Drug abuse refers to (1) the use of prescribed or "over-the-counter" drugs in excess of the directions, and (2) any non-medical use of drugs. Consider the past year (12 months) and carefully read each statement. Then decide whether your answer is YES or NO and check the appropriate space. Please be sure to answer every question.

	YES	NO
1. Have you used drugs other than those required for medical reasons?	Y	N
2. Have you abused prescription drugs?	Y	N
3. Do you abuse more than one drug at a time?	Y	N
4. Can you get through the week without using drugs (other than those required for medical reasons)?	Y	N
5. Are you always able to stop using drugs when you want to?	Y	N
6. Do you abuse drugs on a continuous basis?	Y	N
7. Do you try to limit your drug use to certain situations?	Y	N
8. Have you had "blackouts" or "flashbacks" as a result of drug use?	Y	N
9. Do you ever feel bad about your drug abuse?	Y	N
10. Do your parents ever complain about your involvement with drugs?	Y	N
11. Do your friends or relatives know or suspect you abuse drugs?	Y	N
12. Has drug abuse ever created problems between you and your parents?	Y	N
13. Has any family member ever sought help for problems related to your drug use?	Y	N
14. Have you ever lost friends because of your use of drugs?	Y	N
15. Have you ever neglected your family or missed work because of your use of drugs?	Y	N
16. Have you ever been in trouble at work because of drug abuse?	Y	N
17. Have you ever lost a job because of drug abuse?	Y	N
18. Have you gotten into fights when under the influence of drugs?	Y	N
19. Have you ever been arrested because of unusual behavior while under the influence of drugs?	Y	N
20. Have you ever been arrested for driving while under the influence of drugs?	Y	N
21. Have you engaged in illegal activities in order to obtain drugs?	Y	N
22. Have you ever been arrested for possession of illegal drugs?	Y	N
23. Have you ever experienced withdrawal symptoms as a result of heavy drug intake?	Y	N
24. Have you had medical problems as a result of your drug use (e.g., memory loss, hepatitis, convulsions, bleeding, etc.)?	Y	N

25. Have you ever gone to anyone for help for a drug problem? Y N
26. Have you ever been in a hospital for medical problems related to your drug use? Y N
27. Have you ever been involved in a treatment program specifically related to drug use? Y N
28. Have you been treated as an outpatient for problems related to drug abuse? Y N

What is your age? _____

What is your gender (circle one): Male Female Other

How do you describe yourself (check all that apply):

□ White (non-hispanic)
□ Black/African-American/Caribbean
□ Hispanic or Latino/a
□ Asian or Pacific Islander
□ American Indian, Alaska Native, or Native Hawaiian
□ Bi-racial or Multiracial
□ Other: _____

What is your year in college (check one)?

□ First-year undergraduate
□ Second-year undergraduate
□ Third-year undergraduate
□ Fourth-year undergraduate
□ Fifth-year or more undergraduate
□ Graduate student
□ Other: _____

What is your current residence?

□ On-campus residence hall
□ On-campus residential learning community
□ Greek Housing
□ Off-campus housing
□ Parent or guardian home
□ Other: _____

At what age did you first drink alcohol (beyond just a sip)?

_____ □ Have never used alcohol

At what age did you first use drugs?

_____ □ Have never used drugs

Do your peers use alcohol or drugs?
□ Yes □ No

Do any of your family members have a history of problems related to drug or alcohol use?
□ Yes □ No

Are you currently, or have you ever been in treatment (e.g. counseling, doctor) that has addressed issues related to substance use?
□ Yes □ No